

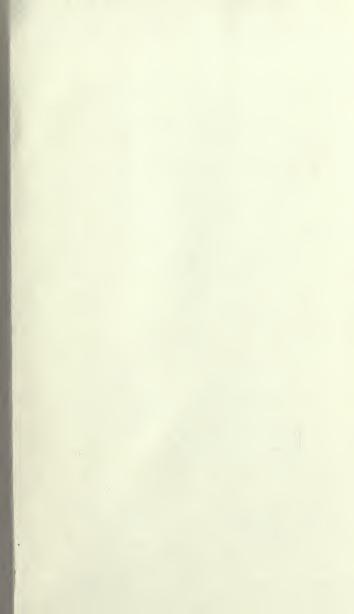


BANCROFT LIBRARY

THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA







Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation



"I" must not be forgotten that our railways are the arteries through which the commercial lifeblood of this nation flows. Nothing could be more foolish than the enactment of legislation which would unnecessarily interfere with the development and operation of these commercial agencies."

PRESIDENT ROOSEVELT
IN HIS MESSAGE TO CONGRESS
DECEMBER 3, 1901.

HEN the Esch-Townsend bill was passed by the House of Representatives, without any real discussion, those charged with the administration of the railroads of the United States were filled with apprehension, for it was evident to them that such a law would surround the transportation industry with conditions that would impair the prosperity of the communities served by the railways and, as a consequence, affect adversely the wages of employees and the returns to share and security holders.

The Esch-Townsend bill did not contain any provision to prevent rebates, discriminations or other evils of which shippers have complained; but, by giving to the Interstate Commerce Commission power to say what railway rates shall be, would have created a system directly opposite to that under which the business men of the United States and the railways have worked together in the development

of the industries and the commerce of the different sections of the country wherein their respective interests lie; a system under which the rates for railway service charged in the United States have become the lowest in the world and American railway efficiency has attained the highest standard.

The traveling and shipping public has not asked that the Interstate Commerce Commission, or any other governmental agency, be endowed with rate-making power but the demand comes from the Commission itself, although in recent years that body has notoriously failed to enforce the laws now in existence, laws amply adequate to remedy any actual abuses and to punish those responsible for them. Whatever general support the Commission has secured is due to the dissemination of misleading arguments and erroneous statistics such as those contained in the report-Senate Document 257-which the Commission sent to the United States Senate in the Spring of 1904.



99782

FOR THE RAILROADS

HE18

THIS book has been prepared for the railways in order to place before the people of the United States some of the principal facts and arguments which demonstrate the gains that result to all producers and consumers from the free action of commercial forces in shipping and transportation, and the losses that result from unwise statutory restrictions. It is not intended to oppose reasonable and proper legislation for the suppression of rebates, unjust discrimination or abuses of any kind in railway rates or methods. Unless otherwise accredited the figures, statements and arguments have been compiled and formulated by the undersigned. They can be readily verified by anyone who will consult the authorities. The writer will gladly comply with requests for additional or more detailed information concerning any of the topics discussed.

H. T. NEWCOMB.

Address:

H. T. NEWCOMB, Bond Building, Washington, D. C.

THE MANGROFT FLAMBARY

RATES WHICH DO NOT AFFECT RETAIL PRICES. The following official statistics show that with regard to many articles of traffic the rates charged for railway transportation are so low that they can not be considered in fixing retail prices; there is no coin small enough to measure them. Even if the articles were carried free, the cost to the consumer would not be reduced, since the saving would be absorbed by the jobber and the retailer. The table presented, shows the rates on different articles and the recent increases in price, irrespective of the freight rate, which has not fluctuated with the wholesale selling price:

COMMODITIES	FREIGHT RATES CHICAGO TO NEW YORK		AVERAGE WHOLESALE PRICES	
	1897	1905	1897	1905
Wheat, per bushel. Corn, per bushel. Oats, per bushel. Flour, per barrel. Mess pork, per barrel. Bacon, per cwt. Lard, per cwt. Butter, per pound Cheese, per pound Eggs, per dozen. Beans, per bushel. Apples, per bushel. Apples, per pound. Coffee, per pound Tea, per pound. Tea, per pound. Coffee, per pound. Coffee, per pound. Wen's shoes, per yard. Woollen goods, per yard. Men's shoes, per pair Ladies' shoes, per pair Straw hats, each. Potatoes, per bushel.	\$0.1275 0.119 0.068 0.27 1.05 0.30 0.0065 0.005 0.014 0.67 0.0075 0.0075 0.25 0.25 0.006 0.0092 0.0092 0.0092 0.0092 0.0025 0.0025 0.0025	\$0.114 0.1064 0.068 0.30 1.05 0.30 0.030 0.005 0.014 0.16 0.67 0.0075 0.0075 0.0075 0.0025 0.0112 0.0025 0.0025	\$0.7437 0.2875 0.222 2.90 8.25 4.30 0.14 0.08 0.115 0.215 0.215 0.215 0.26 0.6375 *4.00 *3.35 2.00 *3.35 2.00 *3.35	\$1.08 0.575 0.3440 4.40 13.37 7.12 0.095 0.20 2.10 0.0375 0.225 0.0675 0.0695 0.0787 0.91 *3.50 *3.50 *3.00 *3.50 *3.00 1.50 *3.00 *3.00 *3.00 1.50 *3.0

^{*} Retail prices.

The cost of freight is included in the wholesale prices quoted, and the freight charges represent, used as they are, the basis upon which all freights, either east or west, are computed. So trifling are these rates in proportion to retail prices that a suit of clothes, hat, dress pattern, pair of shoes, pound of coffee or tea, box of cigars or bag of flour costs no more in San Francisco, Seattle, or Houston than in Savannah, Boston, New York, or Philadelphia.

A FOREIGN VIEW. "If we wish to seek for models of railway operations, it is in the direction of American liberty that we must turn and not to sterile operation by the State."—Pierre Leroy-Beaulieu, Les Etats-Unis, au XXe Siecle (The United States in the Twentieth Century).

ECONOMIC FRICTION IN RAILWAY BUSINESS.

The use of improved machinery in all lines of industry, which began in the earliest years of the nineteenth century, has wrought an industrial revolution, the changes in methods, appliances and results being greater within this one century than in the entire preceding historical period. In this revolution the steam locomotive and the railway have been the most salient and the most important factors. From the close of the American civil war to the present time industrial changes have been more rapid in the United States than anywhere else in the world. Within this period the railway system has grown from 35,000 miles to 210,000 miles; population has more than doubled; wealth has increased more than fourfold; populous cities and sovereign states have grown up where at the beginning was nothing but wilderness. Progress of similar character is going on to-day with undiminished activity. Railways have met this progress by constant adjustments of and reductions in the charges for their services. The average

return to the railways per ton of freight carried one mile is to-day barely one-third of the return secured in 1870 and probably less than one-fourth of that obtained in 1860. The sweeping changes involved by this evolution have required successive adjustments and readjustments of the industrial mechanism and friction at every stage has been a necessary and inevitable incident. It seems at least reasonable to suggest the inquiry, whenever new remedial legislation is proposed, whether the particular difficulties of adjustment in connection with new commercial conditions which it is intended to meet are not likely to disappear with a continuance of those conditions, as undue mechanical friction disappears with the continued operation of the machine in which it arises. If such is the case, legislative interference is not only dangerous, but is certain to produce more harm than good.

RATE-MAKING. Any producer can fix any price he chooses for the commodities he creates. The penalty for fixing a price above that of the market is inability to sell and consequent commercial failure. Just as to sell wheat the farmer must meet market conditions, so in order to sell transportation the railway must place its rates at figures determined by market conditions. The real function of rate-making officers is to study commercial conditions and to adapt their schedules to those conditions so that the rates they contain shall actually be the mathematical resultant of the particular set of controlling commercial conditions to which they are subject.

The changes in the conditions of production and consumption are so rapid that the rate which was reasonable and just yesterday may be unjust to-day, and that which to-day meets the difficulties that developed yesterday may in a week or a month have become as defective as the one which it superseded. Thousands of railway employees scattered all over the country and practically familiar with the industries and needs of each locality are to-day devoting their time, their energy and their thought to the perfection of the adjustment of railway charges to the conditions of the industries which the railways serve.

In giving railroad rate-making power to a governmental body, at least three great impulses toward railroad efficiency are removed:

- 1. Ready response to the public necessity for meeting competition of markets;
- 2. Ready response to the sensitive conditions affecting the transportation of particular products;
- 3. Development of traffic because of the necessity of increasing tonnage.

No agency of Government can translate commercial needs in terms of railway rates which will foster industrial progress as does the free operation of the natural laws of business.

There are many examples of the beneficent consequences of the prompt and intelligent adjustment of rates to sudden changes in industrial needs that would be impossible under Government rate-making. The failure of the Hudson river ice crop during the winter of 1889–90 made it necessary to draw on sources of supply located much farther from consumers than ice can profitably be shipped at normal rates. The situation was presented to the railway company over which the traffic would have to move by the ice companies concerned, and the prompt promulgation of very low rates saved the business of the shippers from disaster and the consumers from an ice famine.

A great western railway finds it expedient frequently to adjust its ore rates to the needs of producers in order to save many of them from bankruptcy. For example, a mine located on a railway can afford to pay more for railway transportation to a common market than one located far from the railway and forced to provide costly wagon transportation before the railway is reached.

A few years ago an entire failure of the Kansas corn crop threatened the cattle feeders of that region with disaster which was only averted by prompt action by the railways in putting in emergency rates so low as to permit drawing upon the surplus corn crops of Iowa, Illinois and other more favored portions of the country.

The whole development of manufacturing industry in the regions west of the Allegheny mountains has been stimulated and made possible by the prompt adjustment of transportation charges to the changing demands of an intensely dynamic industrial situation. By this means the economic condition of an area of imperial dimensions has been changed so that diversified industries furnish a stable foundation for a population far more numerous and prosperous than exclusive reliance upon agriculture would have permitted. Yet without freedom of action in adapting rate schedules to new needs or under any form of political rate-making, the whole western portion of America would have remained exclusively agrarian.

From Michigan to Louisiana and from Texas to Oregon, the rates of the railroads have been so adjusted to the needs of the shippers of lumber, that logs and their products have found continually extending and increasing markets. The citrus and the deciduous fruits and canned goods of California find through continually lowering rates a widening market. The sugar beet and the sugar industry of Colorado and California could never have been placed upon a paying basis had not the railroads made sacrificial rates in

the interest of those industries. When the boll weevil has destroyed the cotton crop in Texas and Louisiana the railroads have instantly made very low rates on cotton seed to the stricken regions. When there has been over production of potatoes and other vegetables, apples and other fruits, melons, rice, and other commodities, that must be marketed at once, or perish, the railroads from the growing regions have made rates that have saved the producers from loss. There is not a coal field in the United States whose operators have not time and again called upon the railroads serving their mines to grant concessions in rates because of changing market conditions. The asphalt industry of Texas and California was built up by the railroads which successively lowered their rates as prices had to be reduced to meet competition in distant markets. The rates on brick, stone, cement, and other building materials are in a state of continual adjustment from places of production to the scenes of building operations. The trade of the United States with the Orient is being built up by the making of rates to the Pacific Coast that allow manufacturers and other producers to ship their merchandise to the trans-Pacific markets.

One of the countless forms of this means by which railroads develop traffic occurred not long ago in Indiana. A resident of that State acquired control of an invention for making butter-dishes from shaved veneer cut from timber. It was discovered that sweet gum, a previously worthless wood, was best adapted to the new industry. A study of the needs of the new business showed that to enable it to be successful a rate 25 per cent lower on this timber than on other kinds was necessary. Such a rate was promptly made, with the result of building up a new and prosperous industry, giving employment to labor and capital and

giving value to a natural product that had previously had no value. Instances of similar character could be multiplied by tens of thousands. They are the stepping-stones by which America has attained its present industrial supremacy.

Such rates are experimental, and they are invariably relatively low. No company could afford to make them the standard of all its charges or to put them in if they could not be abandoned should the business fail to develop. No Government body would ever order such experiments, or could justify its order if it did, and no railway would or could afford to make them if a rate-making Commission existed. For such a Commission would surely regard them as the strongest evidence of the reasonableness of similarly low rates on other business, for which no such commercial justification could be found. If the people of the United States desire a continuance of the marvelous rate of growth of the last three or four decades they will naturally continue the conditions which have made it possible.

"WHAT THE TRAFFIC WILL BEAR." "The system of making rates to develop business, or of 'charging what the traffic will bear,' rightly applied, has been the means—and we shall find it to be the only possible means—of securing efficient service and low rates. * * * Charging what the traffic will bear is a very different thing from charging what the traffic will not bear. It is a hard principle to apply intelligently, but when it is thus applied it adjusts the burdens where they can be best borne, and develops a vast amount of business which could not otherwise exist. * * * The principle of charging what the traffic will bear * * * is unquestionably the principle which enables railroads to render most efficient service to the community. Still clearer is it that the high rates are not to be regarded as a tax which could be removed if the low rates were

abandoned. * * * A system of rates by which each article pays its share of the fixed charges would virtually prohibit the movement of coal. * * * It is clear that with the whole power of the European Governments, the laws of trade have proved too strong for any arbitrary attempt at railroad regulation to succeed."—President A. T. Hadley, Railroad Transportation, pp. 17, 76, 123 124, 246, 248.

RAILWAY OFFICERS WORK FOR SHIPPERS.

Under present conditions, the subordinate railway officers who deal, in the first instance and directly, with the shippers who seek reductions in rates frequently, if not generally, assume the attitude of advocates of the changes requested by the shippers. These officers have charge of the traffic of limited regions, and, in their desire to establish their ability by building up traffic in their own territory, naturally fall into sharp rivalry with other officers of their Companies whose duties are in connection with the business of other communities lying on other portions of their lines and who are impelled by similar ambitions to seek the building up of the business of these rival communities. Thus all these officers are the advocates of the shippers whose interests are so closely allied with This identification of these officers with their own. the commercial interests with which they directly deal, has proved in practice to be a powerful means of bringing about lower rates.

THE LAW OF RATES. "It is frequently stated that there has been no system in the making of railroad freight rates. But there is a law upon which they are constructed that every traffic man from Maine to San Francisco knows must be observed,—rates must move the freight, and, if possible, must move it in increasing quantities."—Professor W. D. Taylor, of the University of Wisconsin, Review of Reviews, August, 1905.

LUCIUS TUTTLE, PRESIDENT OF THE BOSTON AND MAINE RAILROAD. "It is the business of the traffic manager and of the operating manager, in making arrangements for transportation, to see that to the fullest extent possible within their power the customers of that railroad within its territory shall be able to reach the markets of the world at the lowest possible rates, or at such rates as will put them into competition in the markets of the world with the manufacturers producing like goods in widely different sections, perhaps thousands of miles away." Statement before the Senate Committee on Interstate Commerce, A pril 20, 1905.

"TEMPERING THE WIND TO THE SHORN LAMB." "The phrase 'charging what the traffic will bear' has, for some not very obvious reason, undoubtedly acquired an ill repute. On the face of it, it surely seems to represent a principle, not of extortion, but of moderation. To charge what the traffic can bear is, in other words, not to charge what the traffic cannot bear. * * * The real meaning of the phrase is that, within the limits already described—the superior limit of what any particular traffic can afford to pay and the inferior limit of what the railway can afford to carry it for -railway charges for different categories of traffic are fixed, not according to an estimated cost of service, but roughly on the principle of equality of sacrifice by the payer. So regarded, 'what the traffic will bear' is a principle, not of extortion, but of equitable concession to the weaker members of the community. Had railway managers in the past declared that their principle was 'tempering the wind to the shorn lamb,' their descriptive accuracy would have been equally great, while their popularity might have been even greater. * * * Translated into railway language, the principle means this: the total railway revenue is made up of rates which, in the case of traffic unable to bear a high rate, are so low as to cover hardly more than actual out-of-pocket expenses: which, in the case of medium class traffic, cover both outof-pocket expenses and a proportionate part of the

unapportioned cost; and which finally, in the case of high-class traffic, after covering that traffic's own out-of-pocket expenses, leaves a large and disproportionate surplus available as a contribution towards the unapportioned expenses of the low-class traffic, which such traffic itself could not afford to bear. This, in principle and in outline, is the system of charging what the traffic can bear. It is the system which—the point must be reiterated is, always has been, and, as far as we can see, always must be adopted on all railways, whether they be State enterprises or private undertakings. It is a system * * * in the interest of the public. because traffic is thereby made possible which could not come into existence at all if each item of traffic was required to bear not only its own direct expenses but its full share of all the standing charges."-W. M. Acworth, The Elements of Railway Economics, pp. 75-8.

COMMERCE SHOULD BE LEFT FREE FROM FETTERING LAWS. "Trade is no longer limited to circumscribed areas; distance hardly ever bars the making of commercial bargains between widely separated parties, and almost every article of commerce finds the competing product of another region in any place of sale. The consequence is that products of the farm, the forest, the mill and the mine are continually demanding from carriers rates adjusted to values in particular markets. It is this competition of product with like product, of market with market, that has induced carriers, in their eagerness to increase the volume of their traffic, to continually reduce their rates to market points. Such competition is the competition of commerce itself: the strife between competing industries which the public interest demands should be left free from fettering laws and uncontrolled by restraining combinations."—Extract from address of Hon. Wheelock G. Veazey, sometime member of the Interstate Commerce Commission, Railway Congress. World's Columbian Exposition, June 21, 1893, Seventh Annual (1893) Report of the Commission. p. 219.

EXPERT KNOWLEDGE NECESSARY IN RATE-MAKING. "There are very few competent judges of proper traffic rates; it is only the expert who can determine what they should be."—Mr. Edward P. Bacon, Testimony, Interstate Commerce Committee, U. S. Senate, Vol. I, p. 21.

COMPETITION CONTROLS. "I believe Mr. Hagerman is correct—that wherever you can show that a rate is the result of competition, that is the best standard of its reasonableness, because calculated upon any other basis the factors are innumerable."—Mr. S. H. Cowan, Testimony, Interstate Commerce Committee, U. S. Senate, Vol. I, p. 112.

INTRICACY OF RATE-MAKING. Under the law which has been in force since 1887 interstate railway carriers are required to file schedules of their charges with the Interstate Commerce Commission. Under this law no less than 300 separate schedules of rates are, on the average, received daily in the office of the auditor of the Commission, many of these schedules containing hundreds of separate rates and not a few of them thousands. From two-thirds to three-fourths of these new rates are reductions from those in the schedules which are superseded. From April 5, 1887, to the date of its latest (1904) annual report the Interstate Commerce Commission received 2,358,960 rate schedules and the present annual average is about 100,000. Under date of January 19, 1905, Mr. Jesse M. Smith, auditor of the Interstate Commerce Commission, wrote to Hon. James R. Mann, of Illinois, a letter, in which he gave the following as the numbers of separate rate schedules filed by the railways named during the twelve months which ended with November 30, 1904:

RATE SCHEDULES FILED.

	NUMBER
Pennsylvania Railroad	4,123
New York Central and Hudson River Railroad	1,561
Illinois Central Railroad	6,344
Chicago and Northwestern Railway	2,178
Chicago, Rock Island and Pacific Railway	3,375
Chicago, Milwaukee and St. Paul Railway	2,591
Baltimore and Ohio Railroad	3,925
Louisville and Nashville Railroad	3,330
Northern Pacific Railway	774
Union Pacific Railway	789
Wabash Railroad	1,135
_	
Total (eleven railways)	30,125

RAILWAYS DO NOT CONTROL RATES. The tremendous power over trade and commerce involved in fixing railway rates is now neither held nor exercised by any railway officer nor by all of the railway officers of the country together. No check is more real or more effectual than that imposed upon railway officers by commercial competition. No railway ever prospered while serving unprosperous communities. Producers will not produce and consumers will not consume at localities which are subjected to unjust prejudice and disadvantage by the adjustment of railway rates. The present body of railway rates has grown up out of these conditions and subject to these checks. American industry is intensely dynamic, and the changes are rapid and far-reaching. Day by day these changes require changes in rates, and so long as progress continues the schedules must be constantly altered and readjusted. Thousands of railway officers hold daily conferences with tens of thousands of shippers for the purpose of agreeing upon reductions in rates. A recent writer on this question was perfectly accurate in saying, in regard to the rate-making power:

"Given to the Interstate Commerce Commission it will not have been transferred from the railways, for neither singly nor collectively can they or do they now exercise it. It will have been taken from the public, travelers, shippers, and railways among whom it is now diffused, and concentrated in the hands of a government which, by that act of concentration, will be made the most powerful and the most centralized of all the governments on earth from the earliest dawn of history to the present day."

OFFICIAL RATE-MAKING IN GEORGIA. The experiment of Government rate-making has been tried in Georgia about as long and as consistently as anywhere. Yet Georgia shippers are not satisfied. Their attitude is well expressed in the following extracts from a recent editorial in the Atlanta Journal:

"A merchant in Marietta can ship certain goods to Chattanooga for 15 cents per hundred; to Knoxville for 19 cents per hundred. To ship the same goods to Atlanta he must pay 30 cents per hundred; to Macon, 70 cents per hundred. Atlanta is 20 miles from Marietta, Chattanooga is 128 miles, and yet the Chattanooga merchant pays just one-half the freight the Atlanta merchant does. Why? Because Chattanooga is out of the State and Atlanta is in it. This is merely one of a hundred instances where Georgia points are placed at a positive disadvantage in freight rates because they are located in the State."

The editorial continues:

"When a merchant approaches the railroad for rates in Georgia he is met with the reply that the Railroad Commission regulates that, and he can get

no reduction.

"If, however, they are asked for rates to towns outside of Georgia, the application receives immediate and favorable consideration, and the best rates are granted, because the point of destination is beyond the limits of the State and, therefore, not controlled by the State Commission."

In another paragraph of the same editorial the situation is summarized:

"As matters now stand, the plain logic of the situation is that within the State of Georgia, rates being regulated by the Railroad Commission, shippers are powerless to receive fair treatment from the railroads, while to points just beyond the limits of the State they can receive the most favorable rates, and shippers from these points into the State receive the lowest rate that can be obtained; much lower, as a rule, than the Georgia shipper can get."

In the case of the interstate rates the shippers deal at first hand and face to face with the railroads and their officers, while in the case of the State rates the legislature has interposed its authority and that of the State Commission between the two actual parties to every contract for railroad service, thus requiring the negotiations to be conducted at much more than arm's length. The method of doing business thus imposed upon the shippers of State traffic and the railroads carrying it, is cumbersome and absurd. It is only natural that its consequences should be burdensome.

WHAT HAS HAPPENED IN CANADA. "Things don't always pan out as the theorists think they will. The Government of Canada, after operating the Intercolonial Railway for years at a loss, has just announced an increase of rates all along the line, to the disgust of persons who imagine Government ownership means lower rates. In 1904 every dollar of earnings cost \$1.14 in operating and maintenance expenses alone, with no interest to pay on an \$80,000,000 investment. Naturally the tax payers complain and make it lively for the ministry who find it impossible to run the railroad so as to please everybody. On the other hand, persons living along the Intercolonial are also denouncing the Government for increasing freight charges. Referring to the experience of railroads in the United States, the

Railway Age observes that 'even with the rates which are declared to be excessive a majority of the railroads in this country have been bankrupted; a fractional decrease in rates—so small as not to be felt by shipper or consumer—applied to the principal articles of freight might bankrupt many roads now. If Government owned the roads, sweeping reductions would be demanded by every locality and interest, and when the earnings got below expenses, the experiences of Canada, with its unprofitable railroad, would probably be repeated on a vastly greater scale.''—New Haven (Conn.) Journal (Aug. 7.)

THE NATURAL DECLINE IN RATES STOPPED IN ENGLAND BY LEGISLATION. Mr. W. M.

Acworth, the highest English authority on railway economics, in a book published in 1905 ("The Elements of Railway Economics," Oxford, The Clarendon Press), asserts that it is a "point of serious practical importance," to be considered in connection with the British railway legislation of 1891 and 1894, by which Parliament itself undertook to fix rates, that this legislation "has done much to prevent any natural and gradual lowering of rates." He describes the present situation as follows:

"A railway company is still free to lower. It has ceased to be free to raise. A manager may desire to lower a rate, hoping thereby not only to benefit trade, but also, by increasing largely the volume of traffic, to increase his own net earnings. But is is only a hope. In the nature of the case certainty is not attainable in advance. A prudent manager, therefore, will not, unless his hope is closely allied to certainty, lower a rate when he must face a lawsuit before he can put it up again. Still less will a conference of managers—and most important rates affect many companies—allow one of their number more sanguine, or, it may be, more far-sighted, than the rest to go ahead and make experiments. This at least is what we might

expect a priori. Any trader whose experience goes back to the years before Parliament began carefully to regulate railway rates in the interest of trade can say from his own recollection whether the attitude of a railway manager to a suggestion of a reduced rate is nowadays more or less sympathetic than it was thirty years ago."

Mr. Acworth further testifies that:

"The law of undue preference in the hands of a court, where legal rather than commercial considerations necessarily rule, has undoubtedly also had weight in putting a stop to the isolated and tentative reductions which, when cumulated, result in a general reduction of the average rate."

In principle the English railway laws of 1891 and 1894 are similar to those now proposed for the United States. Naturally, they have not worked satisfactorily. At the solicitation of the Senate Committee on Interstate Commerce, Mr. Acworth gave the Committee a statement of the results of the English legislation, in which he said, in part:

"I have no doubt that the interference of Parliament, the courts and the executive have all intended to stereotype and keep rates at an unnecessarily high level. * * * I think that, so to speak, the heart has been taken out of the railway men. The railway men understand this business they know how to manage it in their own way. The railway men think that "responsibility has ceased to be ours we must maintain the status quo," and that is what they do. * * * I think a good deal of our regulation * * * is very much against the public interest."

EUROPE'S LESSON. "Europe's lesson for the United States is that any thoroughgoing and effective effort to regulate railway rates will arrest the decline of railway rates, will prevent the railways from developing a volume of traffic sufficiently large to justify the building of railways of the American standard of efficiency, will check the development of the resources of the country, and will demoralize the politics of the country."—Professor Hugo R. Meyer.

PROFESSOR MEYER. "The experience of all countries that have had a generally effective regulation of railway rates, whether such regulation was exercised by Commission or by means of State ownership itself, has been to bring into politics the question of reasonable rates and the great question of conflict of sectional interests, which is an incident necessary to the development of a country, and the ultimate result has been that railway rates have become inelastic and finally have ceased to decline; they have become stationary and have remained so.

"The result of that has been to paralyze commerce to a very large extent, the railways as effective agents for the development of commerce and the resources of a country; and unless there has been the possibility of escape from that paralysis, through a recourse to a means of transportation that was abandoned in this country in the seventies, namely, by river and canal, the effect has been absolutely disastrous."—Professor Hugo R. Meyer. Testimony before the Committee on Interstate Commerce of the Senate, May 4, 1905.

PRESENT LAW HAS HINDERED REDUCTIONS.

There is a good deal of evidence that the present Inter state Commerce law has somewhat retarded the natural general decline in railway charges. This law was approved by President Cleveland on February 4, 1887, and became effective sixty days later. Prior to that time there had been no statutory restrictions upon the charges for interstate railway services and no Federal supervision of those charges, except such as might be exercised by the United States courts in the application to interstate commerce of the principles of the Common Law. It is possible to make important comparisons between the average railway rates and other significant factors for the period of seventeen years since the enactment of the Interstate Commerce law, and those of the similar period immediately antedating its adoption. These comparisons follow:

	PERIOD OF FREEDOM			
ITEM	1870-1874	1882-1886	Increase (*) or de- crease (-)	
Tons carried 1 mile per			Per cent	
mile of road	333,799	439,137	*31.56	
tons	88.06 99.04	133 .77 113 .40	*51.91 *14.50	
Freight revenue per mile of road operated Revenue from each ton	\$5,093	\$4,629	-9.11	
moved	\$1.59	\$1.23	-22.64	
mills	17.31	10.91	-39.97	

	PERIOD OF RESTRICTION			
1887–189		1899-1903	Increase (*) or de- crease (-)	
			Per cent	
Tons carried 1 mile per mile of road Average train load, in	492,685	760,828	*54.42	
tons	169.22	280.53	*65.78	
Average haul per ton, in miles	120.03	131.25	*9.35	
of road operated	\$4,515	\$5,782	*28.06	
Revenue from each ton	\$1.12	\$1.02	-8.93	
Rate per ton per mile, in mills	9.37	7.45	-20.49	

The results of the comparisons in the foregoing table are highly significant. Although neither the decline in the average payment per ton nor that in the average payment per ton-mile was stopped by the adoption of restrictive legislation, the table shows that rates moved downward twice as fast during the period when interstate railway commerce was wholly free from statutory restriction.

POLITICAL RATE-MAKING IN GERMANY. An excellent illustration of the manner in which political considerations are applied, under Government ratemaking, to the determination of what ought to be purely industrial problems may be selected from the large number given by Professor Meyer. From 1887 to 1891 the rate on grain over the German Government railways from the farms of eastern Prussia to the industrial centers along the Rhine remained at 1.557 cents per ton per mile, although from 1888 the agricultural interests of the former region had demanded a substantial reduction. After repeated refusal by the Bureaucracy the crop failures of 1891 brought about concessions, made in the especial interest, however, not of the eastern agrarians, but of the mining and factory population of the Rhine provinces. Under the reduced tariff there was a rapid augmentation of the grain movement; but the Government of Saxonv protested that its farmers and millers, being located half way between the grain-growing regions of eastern Prussia and the Rhine provinces, had a natural right to supply their home demand for grain and flour and ought not, by means of low rates over the Governmentowned railways, to be subjected to the competition of the farmers and millers of eastern Prussia. Similar complaints were lodged on behalf of the farmers and millers of Bavaria, Wurtemberg, and Baden. Finally, in 1894, the Governments of the protesting provinces notified the Prussian Government that their legislative representatives would not vote for a bill authorizing a commercial treaty with Russia unless the reduced rates on grain were discontinued. In response to this demand the rates on grain were put back, in April, 1894, to the point at which they had been fixed in 1877. The natural objection of eastern Prussia to this restoration of the old rates was coupled with the state-

ment that the protective duty of \$8.75 per ton on grain was of no use to that region unless its inhabitants were permitted to dispose of their surplus grain in the markets of Germany. Thereupon, finding itself under the political necessity of denying them rates for transportation that would enable them to sell their products within the Empire, the Imperial Parliament took the only action which was left to it, and gave the eastern landholders an export bounty of \$8.75 on grain in order that they might sell in Great Britain the surplus which they were not permitted to sell to their own countrymen. Under this law. in the year 1900, the eastern Prussians exported 327,000 tons of bounty-fed wheat and rye, while at the same time western Germany imported, by sea and by river, 2,700,000 tons of wheat and rve on which it paid a duty of \$8.75.

mileage basis. If the Government undertakes to establish the rates primarily, it must reach to a large extent a mileage basis of establishing to this country than the more depicted by the commercial organizations of this country than the establishment of a mileage basis, and if, in their judgment, the proper regulation of railway rates were going to result in that I believe they would withdraw their advocacy of this legislation as a whole. * * * If the proposition were to have the Government fix all the rates of the country, as it has been sought to be made to appear by the opponents of this legislation, I should say that the inevitable result of that would be the reaching of a mileage basis. If the Government undertakes to establish the rates primarily, it must reach to a large extent a mileage basis of establishing those rates, and, in my judgment, nothing would be more detrimental to the commercial interests of this country than the establishment of such a basis. * * * "—Mr. Edward P. Bacon, Chairman, Executive Committee, Interstate Commerce Law Convention, Testimony before Committee on Interstate Commerce, U. S. Senate, Vol. III, p. 1920.

AUSTRALIA'S LESSON. "Australia's lesson for the United States is the visible helplessness of the politician, the absolute inability of the politician to safeguard and to foster the long-run interest of the country in a community of which every section has become demoralized and debauched through an extension of the functions of the Government. * * * Australia's lesson is that the politician in charge of the State never will be permitted to become a business man."—Professor Hugo R. Meyer.

MISCHIEVOUS MEDDLING, BUT WITH GOOD INTENTIONS. In the Freight Bureau cases, which afterwards went to the Supreme Court, the Interstate Commerce Commission, on the complaint of persons engaged in business in the cities of Cincinnati and Chicago, issued an order, which, if it had been complied with, would have modified the existing relations among rates to substantially all southern points of destination. It would have decreased the areas within which certain important cities like Chattanooga, Atlanta, and Selma could do a jobbing business, while the distributing areas open to other cities would have been correspondingly increased. It is to be remembered that this was done in a case in which the interests of Chattanooga, Atlanta, Selma, and the other cities referred to were not represented before the Commission and had no opportunity to introduce testimony or argument. Nor is there a line or a word in the report and opinion of the Commission which indicates that it had found, or why it might have found, that the adjustment of rates as between these destinations was unjust. The drastic reductions ordered in this case—as, for instance, on first-class freight from Cincinnati to Knoxville from 76 to 53 cents per 100 pounds, and on fifth-class freight between the same points from 40 to 22 cents—are striking

enough; but it is perhaps even more significant that the Commission saw fit to break up the long-established relation under which Knoxville and Chattanooga had enjoyed equal rates and to accord thereafter a considerable advantage over Chattanooga to the City of Knoxville. Again, the class rates to Rome and Atlanta had been the same, but the Commission chose to reduce those to Rome much more than those to Atlanta. For example, the first-class rate, which had been \$1.07 to both cities, was reduced 32 cents at Rome and 21 cents at Atlanta, giving Rome an advantage of 11 cents per 100 pounds. The first-class rates to Anniston and Selma had been \$1.07 and \$1.08. respectively, but the Commission reduced the rate to Anniston to 86 cents and left the \$1.08 rate in force at Selma. On the other hand, the rate of \$1.02 on secondclass freight to Selma was reduced to 92 cents, while the 92-cent rate on second-class freight to Anniston was reduced to 73 cents, the reduction in this case to Anniston being 19 cents and that to Selma 10 cents.

SUMPTUARY LEGISLATION IS NOT NEW. The legislative bodies created by English-speaking peoples have on many occasions attempted to modify by statute the natural relations of trade and commerce. When the Black Death diminished the number of English workmen and wages rose so that land owners felt an unaccustomed economic pressure, Parliament sought to fix the wages of labor and thus to deprive workingmen of the increased earnings which the market justified, but these laws only furnished an instance of the impotence of man when he seeks to repeal or modify natural laws. A more familiar example is found in the almost universal effort to regulate interest on loans; it is notorious that laws against usury have had little effect except to accentuate the burdens of borrowers. Such laws have always proved ineffective, and usually whatever they have accomplished has been to the detriment of those in whose behalf they were ostensibly enacted.

POLITICS WOULD SUPPLANT ECONOMICS.

To-day the rivalries between communities are commercial. The controversies which they cause are prosecuted along commercial lines; the contending parties sustain their positions by commercial arguments; and, finally, they are settled by the natural operation of the laws of trade. It is proposed to change all this. There may be no distinct purpose to exclude in greater or less degree the commercial considerations which now govern, but experience shows that the Interstate Commerce Commission has sought to exclude them, and no sane man believes that a politically created body will ever be wholly controlled by nonpolitical considerations.

Is it not possible, even probable, that in spite of impartial purposes, favor will be shown to localities in political accord with the Administration or party in power? Certainly the likelihood of such unintentional bias is not lessened by the fact that the members of the Commission are appointed for limited terms, are almost certain, to desire reappointment, and may be ambitious of further political advancement.

It will be a sorry day for American industry when the question of port differentials or of the relations among railway rates, anywhere, becomes in reality a political question. Do the people of the United States wish to see the great parties which perform such useful functions in their Government divide upon the question whether wheat shall be made into flour for the use of eastern consumers at Minneapolis or at Niagara; whether it shall be live cattle or dressed beef that is shipped east of Kansas City, Omaha and Chicago; whether New Orleans, Galveston, or New York shall draw tribute from the greatest quantity of export grain, or whether the salt produced in New York or Michigan or Kansas shall be most profitably marketed in Iowa?

RAILWAY CHARGES NOT TAXES. To attach an unpopular name to an opponent or to a thing attacked is one of the commonest and cheapest tricks of dema-Shallow thinkers and those who take their views ready-made are easily led astray by the misuse of words, names and maxims. To call a railway rate a tax and to attribute to railway corporations the possession of the taxing power is to designate railway charges by the term applied to the right of Governments which is, in practice, most universally felt and · objected to by the governed. A tax levied by Government, if moderate in amount, may be tolerated although the tax payer is prone to consider it as a necessary evil, but no citizen of a Republic would regard as tolerable for a moment a condition under which any private corporation possessed the taxing power or any portion of it. Therefore it was a shrewd trick on the part of the advocates of railway regulation at the beginning to adopt the policy of speaking of the "transportation tax" and repeatedly to ascribe to railway property "the power to tax other forms of property." Of course no one who accurately comprehends the meaning of the word "tax" can be misled by so shallow an assumption. A tax according to the greatest of modern lexicographers, Webster, is:-

"A rate or sum of money assessed on the person or property of a citizen by government for the use of the nation or state."

The definition given in the Standard Dictionary is similar, viz.:—

"A compulsory contribution for the support of government."

Such payments as those made to the railways have no relation to taxes. Taxes are involuntary payments, railway charges are voluntary payments; taxes are limited by nothing but the self-restraint

of Government; railway rates are closely limited by the most effective form of competition, that of rival producing regions, rival routes, rival markets and rival groups of consumers. It would be quite as reasonable to speak of the "bread tax," the "meat tax," the "clothing tax," the "house tax," or the "church tax," as of the "transportation tax."

THE PUBLIC GETS THE BENEFIT OF IMPROVED METHODS. "In many other lines of business the capitalists in control have pocketed the increase in the receipts produced by economies in operation and manufacture. But in the railway business freight rates have been so administered that the public, rather than the capitalist, has reaped the benefits resulting from the marvelous economies that have been developed in the cost of transportation. It is true the railways have not done this in a spirit of philanthropy, but the public benefit was none the less for that."—Professor W. D. Taylor, of the University of Wisconsin, Review of Reviews, August, 1905.

RATES PER TON PER MILE. The ton-mile is the best practicable measure of the work done by the railways in transporting freight. The average rate of receipts per ton per mile is, therefore, the best practicable measure of the general level of railway charges. The following table shows how these charges have been reduced. The rates for 1870 and 1875, years in which gold was at a premium over currency, have been reduced to their equivalents in gold.

AVERAGE RATE PER TON OF FREIGHT PER MILE IN THE UNITED STATES.

YEAR	RATE	YEAR	RATE
1870 1875 1880 1885	mills 18.89 14.21 12.32 10.11	1890 1895 1900 1903	mills 9.41 8.39 7.29 7.63

Reduction since 1870, 59.61 per cent.

INCREASED USE OF RAILWAY TRANSPORTATION. The best evidence that

of any other nation. This was true in the year 1880, when the number of tons of freight carried one mile per capita of population was only 645, yet since that time the traffic movement per head of population has increased more than threefold. In 1903 no less than 2,155 railway rates are not exorbitant is the rapidly increasing use of railway transportation, an increase which is not understood unless it is borne in mind that railway service enters more largely into the economic life of the people of the United States than into that of the people tons were carried one mile per capita of population. These data are shown in the following

RAILWAY SERVICES.

	The state of the s				
YEAR	POPULATION	PASSENGERS CAR- RIED ONE MILE	FREIGHT CARRIED ONE MILE	PASSENGER MILE- AGE PER CAPITA	TON MILEAGE PER CAPITA
880 895 895 897 898 899 890 900	50,155,783 62,622,250 69,043,000 71,704,000 73,060,000 74,433,000 76,303,387 76,303,387 77,647,000 80,372,000	5,740,112,502 11,847,785,617 12,188,446,271 12,256,6189,647 14,591,327,613 16,0391,327,613 16,039,1327,613 16,039,1327,613 16,039,1327,613 16,039,1327,613	Tons 32,348,846,693 76,207,047,298 85,227,515,891 96,327,515,891 13,667,257,153 141,599,157,270 147,077,136,040 177,289,370,053 173,221,278,993	194 111 111 111 111 111 111 111 111 111	645 1,237 1,237 1,5327 1,861 1,856 1,856 2,159
The state of the s	The second secon				

Significant as the increases shown in the foregoing are, their meaning will be better apprehended if attention is called to the fact that this growth in the volume of railway transportation purchased has outstripped growth in almost every other economic factor in our national life. The following table shows, for several of the more important elements of the industrial life of the United States, the volume utilized in the year 1903 as compared with the years 1880, 1890 and 1900

Note.—The Increases Below are Shown as Percentages of the Amounts for the Earler Years Shown in the Column Heading.

IN- CREASE FROM 1900 TO 1903	20 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
INCREASE FROM 1890 TO 1903	72288888888888888888888888888888888888
INCREASE FROM 1880 TO 1903	264 435 660 160 182 182 770 770 86 86 86 86 111 127
TEMS	ary. mage. onnage. nage.
Ħ	Passengers carried 1 mile Preight, tons carried 1 mile Population National Banks, espital of Notional Banks, espital of Notional Banks, espital of Notional Banks, septial of Noternment receipts, net ordinary. Government receipts, net ordinary. Government expenditures, net ordinary. Imports of merchandise, value Proreign trade, total value. Corn produced, bashels. Corn produced, bashels. Corn produced, bashels. A merican ships in foreign trade, tonnage. A merican ships in foreign trade, tonnage. Post offices, number of Newspapers, number of Newspapers, number of Newspapers, number of Newspapers, number of
	Passengers carried 1 mile Petigit, tons carried 1 mile Population. National Banks, capital of Novernment receipts, net ordinary Government receipts, net ordinary Government expenditures, value Foreign trade, total value. Foreign trade, total value. Corn produced, balsels. Corn produced, balsels. A merican ships in foreign trade, to A merican ships in foreign trade, to Post offices, number of Newspapers, number of Newspapers, number of
	Passengers of Freight, ton Money, and Money,

The foregoing, which is based upon data reported by the Bureau of Statistics of the Department of Commerce and Labor, shows, among other things, that in 1903, the people of the United States purchased 127 per cent more railway freight service than in 1890. Between the same years the amount of money in circulation increased 66 per cent; the capital of the national banks, 16 per cent; Government expenditures, 83 per cent; the value of foreign trade, 48 per cent; the number of bushels of wheat produced, 60 per cent, and the tonnage of American ships on the Great Lakes, 79 per cent.

INCREASE OF HIGH GRADE TRAFFIC. In submitting to the Senate the report printed as Document No. 257, the Interstate Commerce Commission attempted to discredit what has always been regarded as the most satisfactory available standard for measuring the trend of rates. It asserted in the report that:

"It may be said that there is a constant tendency toward an increase in the percentage of the tonnage of low-grade freight, so that if there had been no advance in rates or classification since the year ending June 30, 1899, it is safe to say that the average rate per ton for each of the subsequent years would have been somewhat less than for that year."

In other words, the Commission claimed that the change in the character of the traffic carried between 1899 and 1903 was such that had every rate schedule remained as it was at the beginning of the period the average representing receipts per ton per mile would have declined. This contention is important if it is true; if it is untrue its fallacy ought to be exposed Its weakness will be apparent at once to anyone at all conversant with railroad affairs and industrial conditions. The statement shows a woeful lack of knowledge of what was going on in business affairs from 1899

to 1903. The period was one of unprecedented industrial activity and consequently of widely diffused prosperity. High-class freight consists of merchandise, manufactures, and miscellaneous articles and commodities high in value but small in bulk, and therefore able to stand high rates, since the transportation charge, even at such rates, can constitute only a small part of the cost of the goods at point of delivery. Dry goods is one of the items of high-class freight. Manufactures and finished goods generally fall in the same category. What controls the volume of the shipments of these goods? The demand, of course, and this demand naturally varies according to the consumptive requirements of the population. These requirements in turn are dependent upon business conditions-upon whether labor is fully and profitably employed and upon whether manufacturers, merchants, and producers are making money. During the four years from 1899 to 1903, all classes were extremely prosperous. Wage-earners had no difficulty in finding employment, and many worked overtime. Their rates of pay were increased again and again-in fact, they could demand their own terms. Manufacturers turned out more goods than in any previous similar period in their business experience. Merchants and traders increased their sales correspondingly, while the farming community encountered no setback in its long era of good times. In brief, everyone was in a condition to buy on an extensive scale. In such a state of things the percentage of high-class freight shipped over the railroads could not decrease. Is there not rather every reason for thinking that it would necessarily increase? These are general observations, but they find full support in a study of the statistics available for that purpose. These prove that the ton-mile unit is moving upward rather than down-

ward in quality. The opinion to the contrary is based primarily upon the importance of mine products in the aggregate tonnage of the country. The notion that this great class, which represented 51.47 per cent of the country's railway traffic in 1899 and 51.56 per cent in 1903, is carried at the lowest rates is not supported by the facts. One-fifth of it is anthracite coal, which is charged for at rates that considerably exceed the general average of the country, while more than a quarter moves in those portions of the country comprised in Groups VI, VII, VIII, IX, and X, in which traffic conditions still require rates considerably above the average. Generally speaking, the classes of traffic which move at the lowest rates are farm products, including both vegetable and animal products in that designation. This class of traffic has not grown, and in the nature of things could not have grown with as great relative rapidity as the others. "Products of agriculture" supplied 11.33 per cent of the railway tonnage of 1899 and but 9.56 per cent in 1903, while during the same years the proportions supplied by "products of animals" fell off from 3.12 per cent to 2.63 per cent. Manufactured articles, which made up but 13.45 per cent of all tonnage in 1899 and moved at relatively high rates, supplied 14.39 per cent of the total in 1903. These data clearly tend toward a conclusion diametrically opposed to that claimed by the Commission. Although detailed statistics are not available, the wellknown fact that west-bound traffic has since 1899 grown so as to constitute an unprecedentedly heavy proportion of the total is also strong evidence in the same direction. East-bound movement is commonly of low-grade freight, paying relatively low rates; westbound movement is of higher grade and pays relatively higher rates. Not only is the contention of the Commission "not proven," but it is clear that the ton-mile unit was of higher average quality in 1903 than in 1899.

DECLINING RAILWAY FREIGHT RATES. The following table shows the average gross receipts per ton per mile, as reported by the Interstate Commerce Commission for each of the ten geographical groups according to which its railway statistics are classified:

RAILWAY RECEIPTS PER UNIT OF SERVICE.

GROUP	REGION			PER TON	
		1890	1895	1899	1903
I	Maine, New Hampshire, Vermont, Massachusetts,	Mills	Mills	Mills	Mills
11	Rhode Island and Con- necticut	18.73	12.23	11.23	11.67
III	vania, east of Pittsburg, West Virginia, north of Parkersburg New York, west of Buff- alo, Pennsylvania, west	8.28	6.98	5.82	6.67
IV	of Pittsburg, Michigan, lower Peninsula, Ohio, Indiana West Virginia, south of	6.95	6.42	5.29	6.07
v	West Virginia, south of Parkersburg, Virginia, North Carolina and South Carolina. Kentucky, Tennessee,	8.44	6.70	5.94	7.14
VI	Georgia, Florida, Alabama, Mississippi, Louisiana, east of Mississippi River	10.61	8.95	8.07	8.27
VII	esota, Iowa, Missouri, north of St. Louis and Kansas City, South and North Dakota, east of Missouri River, Michigan upper Peninsula	9.61	9.61	8.21	7.74
	River, Colorado, north of Denver	13.60	10.98	11.01	9.80

GROUP	REGION			PER TON	
		1890	1895	1899	1903
VIII	Arkansas, Indian Territory, Oklahoma Territory, Kansas, Colorado, south of Denver, Texas, Panhandle, New Mexico, north of Santa Fe Texas, except Panhandle, Louisiana, west of Mississippi River. New Mex-	Mills	Mills	Mills	Mills
х	ico, north of Santa Fe Washington, Oregon, Ida- ho, California, Arizona, Nevada, Utah, New Mex- ico, western portion		12.53	10.65	9.74
	The United States	9.41	8.39	7.24	7.63

The foregoing shows that the average rates were lower in 1903 in every one of the ten groups than in 1890, that they were lower in nine groups than in 1895, and lower in five groups than in 1899.

TRAFFIC INCREASES GREATEST WHERE TON-MILE RECEIPTS ARE HIGHEST. Of all traffic changes, those in the territorial distribution of tonnage movement are most accurately and comprehensively portrayed by published statistics. The Statistician to the Interstate Commerce long ago adopted a geographical classification of the data which he compiles, and the averages in which his conclusions are expressed are presented for each of ten great divisions of the country as well as for the United States as a whole. In 1899 there were three of these divisions in which the average receipts per ton per mile were lower than 6 mills, the range being from 5.29 mills in Group III to 5.94 mills in Group IV. The

owest average for any other group was 8.07 mills and the highest 11.36 mills. The average for the entire country was 7.24 mills, the lowest of any year in the history of the American railway system. Figures for the year 1903 show that the average revenue per ton of freight per mile for the entire country was 7.63 mills, an advance over 1899 of not quite four-tenths of a mill. In 1899 55.45 per cent of the traffic movement of the United States was within the three groups where rates were lowest, none of which had an average of receipts per ton per mile as high as 6 mills. From 1899 to 1903 the ton mileage of the country increased 40.07 per cent, and of this great increase 57.37 per cent went to the groups in which the average in 1899 exceeded 8 mills. The business of the three groups having low rates grew but 30.81 per cent, while that of the seven higher groups grew very much more rapidly, or actually 51.60 per cent. Thus changes in the geographical distribution of traffic, which can easily be traced in the Commission's reports, would have resulted in a higher instead of a lower average rate per ton per mile "had there been no advance in rates or classification." The following table shows the ton mileage of each group for the years 1899 and 1903, with the percentages of increase:

TON-MILEAGE

	TON-MIL	EAGE.	
GROUP	1899	1903	INCREASE
I	6,030,279,854 8,547,922,813 22,311,097,477 3,467,159,799 8,080,198,237 3,740,142,138 4,841,029,424	5,114,609,555 47,127,274,771 34,804,198,236 7,760,464,917 13,174,890,160 32,535,907,493 5,842,151,338 12,541,491,467 5,595,345,082 8,724,936,974	24.39 · 25.80 28.80 28.69 54.13 45.83 68.50 55.21 49.60 80.23
Total	123,667,257,153	173,221,278,993	40.07

The precise influence of these changes in the geographical distribution of tonnage can be measured by using the traffic movement of each group in 1903 as a "weight" to be applied to the average ton-mile revenue of the same group in 1899, and thus obtaining a weighted average. Such a computation is shown below:

GROUP	AVERAGE RECEIPTS PER TON PER MILE, 1899	TON-MILEAGE,	PRODUCTS
I II III III III III III III III III I	11.23 5.82 5.29 5.94 8.07 8.21 11.01 9.68 10.65 11.36	5,114,609,555 47,127,274,771 34,804,198,236 7,760,464,917 13,174,890,160 32,535,907,493 5,842,151,338 12,541,491,467 5,595,354,082 8,724,936,974	\$ 57,437,065 274,280,739 184,114,209 46,097,162 106,321,364 267,119,801 64,322,086 121,401,637 59,590,521 99,115,284
United States.	7.24	173,221,278,993	\$1,279.799,868

In order to ascertain from the foregoing what would have been the effect of the changed geographical distribution of tonnage had there been no changes in average rates within the different groups, it is necessary to divide the total of the last column by the total of that directly at the left. The quotient thus obtained is 7.39 mills, and the calculation shows that 0.15 mill of the rise of 0.39 mill from 1899 to 1903, or 38.46 per cent is accounted for by mere changes in the geographical distribution of traffic.

REDUCTIONS IN THE CLASSIFICATION OF FREIGHT. One of the ways in which reductions are effected is by moving articles from higher to lower classes in the freight classification. An examination of the classification changes, from 1887 to 1902, among

the representative articles of freight selected by the Interstate Commerce Commission for illustrative purposes and given in its "Forty-Year Review of Changes in Freight Tariffs," shows that out of 847 representative commodities, the entire number shown by the Commission, the classification of 254 articles, or 29.98 per cent was reduced, and that of 125, or 14.76 per cent was advanced. The details appear in the following table:

NET CHANGES IN THE CLASSIFICATION OF FREIGHT 1887 TO 1902.*

The second secon		NUMBER	OF ITEMS	
CLASSIFICATIONS	Classified lower in 1902 than in 1887	Classified higher in 1902 than in 1887	Classified the same in 1902 as in 1887	Total repre- senta- tive items
The Official Classification. Less than carload shipments Carload shipments	46 75	65 30	160 168	271 273
Total	121	95	328	544
The Western Classification Less than carload ship- ments Carload shipments	19 45	11 12	74 47	104 104
Total	64	23	121	208
The Southern Classifica-	69	7	19	95
Grand total	254	125	468	847

^{*} This table does not cover all items in the various classifications, but only those selected as representative by the Interstate Commerce Commission. The comparisons relate to the representative commodities used by the Commission in making up the comparative tables on pages 24 et seq. of "A Forty-year Review of Changes in Freight Tariffs."

DEVELOPMENT DUE TO RAILWAYS. "We may boldly say without the railroads three-quarters of the immense territory of the United States, situated too far from the sea, and having insufficient communication by rivers or lakes, would be still almost deserts, and would not play in the economical life of the world a more important part than Siberia did, for instance, before being lifted from her isolation by the trans-Siberian Railroad.—"From Les Etats-Unis au XXe Siecle (The United States in the Twentieth Century).—Pierre Leroy-Beaulieu.

WHEAT AND FLOUR RATES DECLINE. Rates for specific services and particular commodities are constantly being reduced. Nearly all of the three hundred and odd new rate schedules received in the office of the Interstate Commerce Commission on every working day are issued to report reductions. The most important single rate in the country is that on which grain is moved by the all-rail routes between Chicago and New York. This is not only because it is the rate between the greatest grain market in the United States and the most important port through which grain is transshipped for export, but because the Chicago-New York rate is used as the basis of other rates in such a way that any change involves a change in the rates applied to substantially every bushel of wheat sent to market. The following table shows the average annual rate on wheat from Chicago to New York via the allrail and lake-and-rail routes, and on wheat and flour via the all-rail routes from St. Louis to New York:

AVERAGE RATES ON GRAIN AND FLOUR. (From Statistical Abstract for 1903, pp. 408-409).

	WHI	EAT	Wheat	
Year	Chicago to per b		St. Louis to New York per 100	Flour St. Louis to New York,
	Lake & rail	All rail	pounds, all rail	per barrel, all rail
	Cents	Cents	Cents	Cents
1800	15.7	19.9	42	84
1881	10.4	14.4	32	64
1882 1883	10.9 11.5	14.6 16.5	29.5	59 66
1884	9.95	13.125	26	52
1885	9.02	14	22.14	44.29
1886	12	16.5	29	58
1887	12	a15.74	32.13	64.25
1888	11	a14.5	29.5	59
1889	a8.7	15	28.5	58
1890	8.5	14.31	27.63	52.63
1891	8.53	15	29	58
1892	7.55	14.23 14.7	26.62	58 57
1893	8.44	12.88	28.5 24.73	50
1895	6.95	12.17	23.57	47
1896	7.32	12	23	46
1897	7.37	12.32	23.64	47.26
1898	4.96	11.55	22.25	45.10
1899	6.63	11.13	21.95	43.90
1900	5.05	b9.08	19.38	38.76
1901	5.57	b9.02	17.33	38.66
1902	5.78	b8.75	20.66	41.33
1903	6.17	b8.89	21.50	42.50

a Published rates; actual rates lower. b For export; wheat for domestic use higher.

"At the present time each railroad is practically competing against the whole world in the interest of the industries on its line; that makes those industries compete against all other industries; it helps the producer and helps the consumer, and makes industrial combination harder than if things were centered in fewer localities, as they would be if the Government tried to intervene and virtually pick out what territory each industry should operate in."—Walker D. Hines before Senate Interstate Commerce Committee.

GREAT REDUCTIONS TO THE SOUTH. The most important of recent reductions in railway rates are those on traffic destined to Atlanta and other southern cities. These apply to the greater portion of the entire South and from both western and eastern points of origin. The following table is merely illustrative of these important changes:

(Rates in cents per hundred pounds.)

TO ATLANTA. GA.: PROM:-						CLASSES	SES					
	-	31	es	4	5	9	2 3 4 5 6 A B C D E	×	၁	Ω	~	H
Boston, Mass., and Providence, R. I.: Previous rates. Present rates	1114	98	% % %	683	60	44	386	848	40	330	55.8	89
Reduction	6:	5	65	13	5 4		5 0 0	0	0	0	0	00
New York, N.Y., and Philadelphia, Pa.: Previous rates. Present rates.	1114	98	888	\$ 33 \$ 23	60	64	386	48	40	339	25.55	89
Reduction	6	5	ot	5	5 4		5 0 0 0	0	0	0	С	oc
Raltimore, Md.: Previous rates. Present rates.	107 98	92	2×2	63	52	46	24	45	37	36	555	65
Reduction	6	5	83	rů	4	5	0	0 0	0	C	0	oc

FROM BOSTON, MSS., AND	PROVIDENCE, R. 1.	ATLANTA Pre- New vious rates rates		Iron, special, I. C. L 43 40		L., C. L., 3612	Canned goods, N. O. S., C. L. 439 44	nit jars and jelly glasses,	strt. or mixed, C. L 57 500	57	Glucose, O. R. L., in wood, C. L 36 30	36	36	36	Oatmeal, rolled oats, etc., any quantity 35 30	slush and	soap stock, snipped to soap manuac-
MASS.,	CE, R. 1.	Re duct-	8	00		22.22	04	1	_	_	9				r0 4		. 10
NEW	PHILAL	Pre- vious rates		43		36 1/2	61	14	200	22	325	36	36	36	35		35
FROM NEW YORK, N.Y.,	PHILADELPHIA, PA	New		40		333	57	0 2	00	53	30	34	30	34	20		30
N.Y.,	PA.	Re- duc- tion		က		10 H	24	1		4	210	7	9	21	04		.c.
BALT		Pre- vious rates		42		33 72	56	223	3	53	30	54	34	34	56		33
FROM BALTIMORE,		New		39	1	30	25	46	2	49	200	25	28	375	52		28
MD.		Re- duc- tion		ಣ		10 m	24	7		40	.10	4	9	SIL	04		5

TO ATLANTA, GA., FROM:-						CLA	CLASSES						
		23	8	4	2	9	A	В	C	D	国	Н	Fa
Cincinnati, O., and Louisville, Ky.: Previous rates. Present rates.	107	92	81	68	56	46	22.28	335	288	24	8 8	53	844
Reduction	6	5	60	52	4	5	0	62	2	62	0	00	4
St. Louis, Mo.: Previous rates Present rates.	135	115	101	82	68	56	355	43	335	29	56	63	62
Reduction	6	5	8	52	4	5	0	7	2	23	0	000	4
Memphis, Tcnn.: Previous rates Present rates.	103	8388	77	64	52	37	24	31	22	20	44	49	40
Reduction	6	5	8	5	4	2	0	2	2	2	0	∞	4
Chicago, Ill.: Previous rates Present rates.	147	126	106	85	711	53	40	47	338	324	61	89	68
Reduction	6	20	8	2	4	5	0	63	63	2	0	œ	4

a Rates in cents per barrel.

FROM CHICAGO, ILL.	New duc-		32 37 68 4 4 2	61 7	64 4 60 2	37 5
СНІС	Pre- vious rates	52 60 76	39 72	89	62	42
ENN.	Re- duc- tion	でで4	01 014	~	40	2
FROM MEMPHIS, TENN.	New	31 488 488	18 18 36	42	39	23
MEM	Pre- vious rates	36 41 52	20 40 40	49	49	28
MO.	Re- duc- tion	7004	0 04	10	40	2
FROM ST. LOUIS, MO.	New	45 50 66	29 29 28	26	61 56	37
S.T.	Pre- vious rates	50 70	31 31 62	61	58	39
онго,	Re- duc- tion	10104	01 014	7	40	70
FROM CINCINNATI, OHIO, AND LOUISVILLE, KY.	New	84 to 0 to 10 to 1	22 44 44 44	46	49	27
CINCIN	Pre- vious rates	54 56	24 48 48	53	53	32
au c	CINVIEW OF	Agricultural cultivating implements, C. L. Canned goods, C. L. Same, L. C. L.	Self-raising In sacks. In sacks In sacks. Fruit in and	jelly glasses, straight or mixed, C. L.	Glass, rough, for skylights, C.L., & window glass, C.L. Meats, fresh, C. L.	Catmeal, rolled oats, etc., any

OF ATLANTA PRON UPROFILE OF						CL	CLASSES						
The state of the s	-	23	2 3 4 5 6 A B C D E H F a	4	70	9	A	В	၁	D	E	H	Fa
Previous rates.	84	79	79 64 76 62	52	43	40	24	34	288	27	45	555	555
Reduction	4	8	63	23	23	က	0	2 2 3 0 0 0 0	0	0	0 0	0	0

a Rates in cents per barrel.

COMMODITIES.

REDUCTION	ುಬಲು ಹಲ ಹಿ <u></u> ತುತ್ತು ಬ
PRESENT RATES	1 83 379 74 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
PREVIOUS RATES	2 22 22 20 20 20 20 20 20 20 20 20 20 20
TO ATLANTA FROM VIRGINIA CITIES	Ale, beer, porter, and other malt liquors, ginger ale and mineral water, C. L. Same, L. C. L. Same, L. C. L. Glassware: fruit jars, glass and jelly glasses, strt. or Glass, window and rough, for skylights, C. L. Iron, scrap, and steel, including old rails (not for relaying purposes), when shipped with mixed lots of scrap iron, C. L., per ton of 2,000 pounds. Soap, common. Soap, common. Syrup, glucose, and washing compounds. Starch, C. L. Syrup, glucose, and molasses, O. R. L., in wood or in tin cans, boxed, any quantity.

FARMERS' SAVINGS FROM REDUCED RATES.

West of a line formed by the western shores of the Great Lakes, the Illinois-Indiana State line, and the Mississippi river, every one of the groups used by the Interstate Commerce Commission for the classification of railway statistics shows a marked decline in rates from 1899 to 1903. The following table shows for each of these groups and for all of them together the difference between what the shippers actually paid for railway freight and the higher amounts which they would have had to pay had the higher average rates of 1890, 1895, or 1899 been maintained:

GROUP	Traffic move- ment in 1903,		NTS SAVED IN	
	in ton miles	1890	1895	1899
VII VIII IX X	32,535,907,493 5,842,151,338 12,541,491,467 5,595,354,082 8,724,936,974 65,239,841,354	56,363,093	24,957,568 15,611,038 22,335,839	\$15,291,877 7,069,003 752,489 5,091,772 11,429,667 \$39,634,808

The great agricultural region of the Mississippi and Missouri valleys is embraced in Groups VI, VII and VIII, while Group IX includes the farms, cotton plantations, and cattle ranches and ranges of Texas. Group X includes the Pacific Coast states. It is especially noteworthy that there has been no cessation in these important regions of the decline in railway charges, even as measured in money of greatly decreased purchasing power.

EFFECT OF THE DECREASED PURCHASING POWER OF MONEY. Whether railway rates have generally advanced or generally decreased during the years from 1899 to 1903 and thereafter can not be answered by simple comparisons of averages expressed

in dollars and cents. It has long been realized that any effort to study the question of wages, throughout an extended period, which fails to take into consideration the purchasing power of the money received by the wage-earners is worse than valueless, because it is deceptive and misleading. It has been generally recognized also that any effort to estimate the real income of particular classes of producers by comparisons of the prices obtained for their products at different periods, as that of farmers by the prices of corn and wheat, is similarly dangerous unless these prices are measured by quantities of commodities which such producers must purchase.

President Hadley, of Yale, in his "Economics," says:

"The value of money is measured by the quantity of other things which a unit of money will purchase. It varies inversely as the general level of prices. If general prices are high, a given amount of products or services will cost a great many dollars. * * * The piece wage received by any workman multiplied by the number of pieces which he makes in a day constitutes his day's earnings or nominal wage. The amount of comforts which he can buy with the money received as nominal wages represents his real wage."

The most important fact in the economic history of the last five years is the fall in the value of money. On this account all nominal prices, wages and rates have gone up. But unless a particular article or service has gone up in price faster than the general average it has not really advanced at all. The slight nominal advance in the average railway rate is much less than the general average advance. Therefore, as is shown in following paragraphs, rates have really gone down.

TYPICAL RECENT REDUCTIONS IN RATES.

Among recent reductions in railway rates of importance, made under the action of commercial forces, is that

of the rate on lumber from St. Louis and Kansas City to St. Paul and Minneapolis, from 16 to 14 cents per 100 pounds. Sugar rates from the Atlantic seaboard to the Missouri river and to New Orleans have been reduced, and so have those applied to crackers and other bakery products throughout the entire West. The rates from the Mississippi river to points in Iowa on soft coal; those on seed wheat for the farmers of Minnesota, Iowa, and Dakota; those on wire articles, nails, etc., from Chicago and Milwaukee to the Mississippi river, and those on grain from Mississippi river crossings to points in Ohio, Indiana and Michigan furnish other recent examples of significant and far-reaching reductions.

INCREASING COST OF RAILWAY OPERATION.

In 1899 it cost \$856,968,999 to operate the railways of the United States; in 1903 the same expenses amounted to \$1,257,538,862, an increase of \$400,569,863. In 1899 railway labor, exclusive of salaried employes, received \$481,264,109; in 1903 the same classes of labor received \$720,580,923, an increase of \$239,316,814. In 1899 the fuel used by locomotives cost \$77,187,344; in 1903 it cost \$146,509,031, an increase of \$69,321,687. Comparing operating expenses with work done, it appears that in 1899 for every dollar expended for operation the railways were able to carry 17 passengers and 165 tons of freight one mile. In 1903 the passenger mileage for each dollar expended in operation amounted to 16.6 and the freight mileage to 138. Each \$1 of operating expenses in 1899 brought in \$1.53 in revenue, not including that from miscellaneous services, while each dollar of operating expenses in 1903 brought in only \$1.38 in revenue. The decrease amounts to substantially 10 per cent. The following table shows these data in detail:

OPERATING EXPENSES.	1899	1903
Operating expenses, total. Business done: Passenger mileage. Ton mileage. Per \$1 of operating expenses: Passenger mileage. Ton mileage.	\$856,968,999 14,591,327,613 141,599,157,270 17 165	\$1,257,538,862 20,915,762,881 173,221,278,993 16.6 138
Average receipts: Per passenger mile—mills. Per ton mile—mills Average receipts per \$1 of	19.78 7.24	20.06 7.63
operating expenses: From passengers From freight	\$0.34 1.19	\$0.33 1.05
Total	\$1.53	\$1.38

Decrease of 10 per cent

Calculations similar to those just given, comparing the efficiency of each dollar expended for wages in the years 1899 to 1903, show that the somewhat higher average rates of 1903 produced but \$2.48 for each dollar spent in wages, while in 1899, each dollar spent in wages earned \$2.73. The decrease again amounts to substantially 10 per cent. The table follows:

WAGES (NOT INCLUDING SALARIES.)	1899	1903
Wages, amount of Passenger mileage Ton mileage Per \$1 paid in wages:	\$481,264,109 14,591,327,613 141,599,157,270	\$720,580,923 20,915,762,881 173,221,278,993
Passenger mileage Ton mileage Average receipts:	30.3 294.	20.7 246.
Per passenger mile—mills Per ton mile—mills Average receipts per \$1 spent	19.78	20.06
for wages: From passengers. From freight.	\$0.60 2.13	\$0.60 1.88
Total	\$2.73	\$2.48

Decrease of 10 per cent

Fuel for locomotives represents, next to wages, the highest single expenditure for railway operation. The efficiency of dollars spent for fuel has, owing to the increased cost of coal and other fuels, very rapidly decreased. The following table shows that each dollar thus expended produced \$17.02 of revenue in 1899 and about 30 per cent less, or \$11.89 in 1903:

COAL AND OTHER FUEL USED BY LOCOMOTIVES.

	1899	1903
Wages, amount of	\$77,187,344 14,591,327,613 141,599,157,270	\$146,509,031 20,915,762,881 173,221,278,993
Passenger mileage	189 1,834	143 1,182
Per passenger mile—mills Per ton mile—mills	19.78 7.24	20.06
Average receipts per \$1 worth of fuel: From passengers	\$ 3.74	\$ 2.87
From freight	\$17.02	\$11.89

Decrease of 30 per cent

NOMINAL ADVANCES IN RATES WERE UNAVOIDABLE. Data, taken from Government reports of unimpeachable authority, prove that the advanced railway rates which have been so loudly exploited are increases in name only. There have been no real advances, as is perfectly clear when the lower purchasing power of money is taken into account. What actually happened is that prices of commodities rose so rapidly and so greatly that it was absolutely necessary, in order to avoid railway bankruptcy, to adjust charges to the enhanced cost of labor and supplies. The adjustment was somewhat tardily under-

taken and not until great losses had been sustained through the increased cost of nearly every item of labor and material necessary to operation. When the changes were made they were made with a profound sense of the delicacy of the adjustment of business conditions to the charges established in the schedules, with full recognition of the fact that although the scheduled rates may be reduced they are unlikely ever to be increased. In spite of the pressure of increased wages and prices, the level of railway rates has not moved upward far enough to restore its old relation to the general level of either. In other words, the nominal advances in railway charges did not, on the whole, make up for more than a small and insignificant proportion of the advance in the cost of labor and supplies. President Hadley, of Yale University, a profound student of railway economics, has well said:

"It seems also clear that the average increase in rates is apparent only and not real. If the price of goods carried and wages of railroad laborers and the cost of materials of railroad construction and operation have increased from 10 to 40 per cent, an increase of apparent charge of 5 per cent on the part of the railroads is virtually a tremendous and gratifying decrease."

[&]quot;'The highways of transportation must be kept open to all upon equal terms.' On that basis the railway companies are ready and anxious to aid and co-operate."—Samuel Spencer, before Senate Interstate Commerce Commission.

"If there are unjust and unreasonable rates in existence, the remedy is at hand. We have seen that of the cases which have gone to the courts not one single charge of unjust and unreasonable rates per se has been sustained."—Samuel Spencer before the Senate Interstate Commerce Committee.

PRICES AND RAILWAY RATES. Changes in the purchasing power of money have been scientifically investigated by many students whose labors cover long periods of time and include a wide range of commodities, and there can be no doubt that the close attention given to this subject has resulted in methods of great accuracy and reliability. The United States Department of Labor under the direction of the greatest of statisticians, Hon. Carroll D. Wright, has established a series of index numbers according to a method which he developed that is probably the best and the most comprehensive ever continuously applied to this problem. The method employed was to collect large numbers of quotations of wholesale prices, which were classified in certain groups and averages obtained for each group and for all the commodities represented. The years from 1890 to 1899 were taken as the basis and represented as 100 per cent, while the prices of each year are represented as percentages of the bases thus established. Applying the same method to the average rates per passenger per mile and per ton of freight per mile reported by the Interstate Commerce Commission and placing the results in juxtaposition with the index figures reported by Colonel Wright, we have the following table, which, with the exception of the columns showing railway rates, is precisely as it appears in Bulletin No. 51, of the Department of Labor:

Wholesale prices and rates compared with averages for the decade from 1890 to 1899

(percentages).

	All com- mod- ities	100.0 1112.9 100.0
	Miscellane- ous art'l's	100.0 1100.0 1100.2 1005.2 105.2 105.2 105.2 105.2 107.7 107.7 113.6
	House Furn- ishing Goods	100.0 110.2 110.2 100.1 100.3 100.3 100.3 100.3 100.3 113.2 113.2
	Drugs and Chem- icals	100 100 100 100 100 100 100 89 89 89 87 89 89 89 89 89 89 89 100 100 100 100 100 100 100 100 100 10
E PRICES	Lumber Bldg. Materials	100 100 100 100 100 100 100 100 100 100
WHOLESALE	Metals and Imple- ments	100 .0 1111 .7 100 .0 100 .7 100 .7 100 .7 992 .0 88 .6 86 .6 1124 .7 1111 .9 117 .2
W	Fuel and Light- ing	1000 1004.7 1004.7 1001.7 1001.7 1001.0 1005.0 1005.0 1119.5 1134.3 149.3
	Cloths and Cloth- ing	1000 0 11113.5 11113.5 1100 0 0 1 100 0 0 0 0 0 0 0 0 0 0 0 0
	Food, Etc.	1000 1112.4.7 1115.7.4 1103.6 1105.9 99.8.8 87.7.7 994.4 1005.9 1105.9 1105.9
	Farm prod- ucts	100.0 110.0 121.5 107.9 95.9 95.3 78.3 85.2 96.1 100.0 1116.9 1130.5
SAILWAY RATES	Fr'ght Rates	1000.0 1112.1 106.6 107.0 1002.5 1000.0 96.0 96.0 98.7 886.3 886.3 886.9 990.2
RAILWA	Pas- senger- rates	1000 1000 1000 1000 1000 1000 1000 100
0	YEAR	1890-1899 1890-1899 1891 1891 1894 1894 1895 1896 1899 1900 1900 1900

The foregoing table indicates, with regard to all commodities, that the prices in 1903 averaged 13.6 per cent higher than the average prices of the period from 1890 to 1899, inclusive, and that from 1899 to 1903 there was an increase of 11.7 per cent. shows that during 1903 rates for railway passenger service were 2.5 per cent lower than the average of 1890 to 1899, and those for railway freight service 9.1 per cent lower. From 1899 to 1903, while the general average of commodity prices rose 11.7 per cent railway passenger rates rose 1.4 per cent and freight rates rose 5.3 per cent. In other words, the amount obtained by selling the same quantities of commodities in general would buy more transportation of either freight or passengers in 1903 than it would in 1899, or, to reverse the form of the statement, a particular amount of railway service would buy less in commodities in 1903 than in 1899.

"The low rates made by American railroads are the surprise and wonder of foreign railroad men, averaging not more than one-third to one-half of the rates for similar services in other countries under Government control and ownership. The foreign railroad officials who have studied this subject here credit these low rates to the sharp, intense competition between railroads having individual liberty of action and desire to build up new territories, forcing the managers and heads of departments to an intensity of research, investigation and development of economies in cost of service unheard of in countries where the railroads are owned or controlled by the Government."—

Joseph Ramsay, Jr., before Senate Interstate Commerce Committee.

following table shows comparisons of the percentage relations of prices and railway rates to the average of the 10-year period from 1890 to 1899, inclusive, for each of the different groups of commodities according to the classification adopted by Commissioner of Labor Wright: COMMODITIES WILL BUY MORE RAILWAY SERVICE THAN IN 1899. The

Average Rates and Prices of the Years 1890 to 1899, Inclusive, Equal 100.00 per cent. COMPARISONS. OF INDEX NUMBERS.

ITEMS	YEAR 1899	YEAR 1903	INCREASE
Railway rates:	Per cent	Per cent	Per cent
Passenger. Freight	96.2	97.5	1.35
Wholesale prices: Farm products.	100.0	118.8	08.81
Food, etc.	98.3	107.1	8.95
Fuel and lighting.	105.0	149.3	10.24
Metals and implements. Lumber and building materials	114.7	117.6	2.53
Drugs and chemicals.	111.3	112.6	1.17
Miscellaneous articles.	95.1	113.0	18.82
All commodities.	101.7	113.6	11.70

the foregoing, but based upon specific commodities instead of classes of commodities, the data for prices being from pages 636 et seq. of the Eighteenth Annual Report of Commissioner of Labor Wright: Going further into details, the following table shows comparisons similar to those in

	INDEX	EX	INCREASE		INDEX	INDEX	ERAE
	1899	1903			1899	1903	
Rates: Per passenger mile	96.2	97.5	Per cent	Prices: Fish. salt.	100.2	108.4	-
Per freight ton-mile	86.3	6.06		Flour, wheat	94.6	101.2	6.98
Apples, evaporated	99.2		1.31	Milk, fresh.	98.9	105.8	
Beans, dry	20.66	118.1	18.46	Molasses	98.5	103.8	
. :	103.7	113	90.6	Pork, fresh	101.7	127.0	
Beef, fresh, steaks	103.9		8.66	Pork, salt, bacon	102.9	139.8	
Beef, salt	103.2	108	5.43	Pork, salt, dry or pickled	101.8	129.0	
Bread, wheat	9.66	100		Pork, salt, ham	99.2	121.3	
Butter	7.76	110	13.41	Potatoes, Irish	96.1	114.8	
Cheese	102.4	109		Prunes	85.1	80.2	
Chickens	101.8	118		Rice	102.4	103.9	
Cottee	90.2	89		Sugar	101.7	96.1	
Corn meal	95.1	120		Tea	104.4	106.0	
Eggs	101.1	125		Veal	103.7	114.9	
Fish, fresh	100.2	107.3	60.2	Vinegar	98.3	99.1	

An examination of the foregoing table shows that it includes index numbers based upon price quotations representing 30 specific commodities, and that of these 30 commodities 24 advanced more rapidly between 1899 and 1903 than railway freight rates.

a Decrease

DUN'S INDEX NUMBERS SHOW DECREASED COST OF RAILWAY SERVICE.

The most valuable index numbers compiled in the United States by private statisticians are different periods of the average quantity of commodities of different classes required for one those regularly published in Dun's Review. These figures aim to show the specific cost at year's consumption by the average inhabitant of the United States. From these figures it appears that the wholesale cost of the commodities required by the average citizen was, at the prices of July 1, 1887, \$85.23, while at those of July 1, 1903, it was \$99.46. These figures are regarded as of sufficient importance by the statistician in charge of the Bureau of Statistics of the Department of Commerce and Labor to be repeated in his monthly reports. The following table shows all of the index numbers compiled for Dun's Review for July 1 of each year from 1899 to 1903, inclusive:

DUN'S INDEX NUMBERS.

(From Monthly Summary of Commerce and Finance of the United States, published by the Bureau of Statistics of the Department of Commerce and Labor, pages 1751-1752.)

Total	\$ 85,227 91,415 91,509 101,910
Miscellane- ous	\$12,969 16,070 16,617 16,826
Metals	\$15,635 14,834 15,344 16,084
Clothing	\$15,021 16,324 15,098 14,533
Other Food	\$9,157 9,482 9,086 8,748
Dairy and Garden	\$10,974 10,901 11,030 12,557
Meats	\$ 7,988 8,906 9,430 11,628
Breadstuffs	\$18,433 14,898 14,904 20,534
July 1	1899 1900 1901 1902

It may be assumed for the purposes of calculation that in each of the items of the sumption. Assuming that this was true in 1899, and that the same volume of each class of rates of the succeeding years, precisely the same quantity of transportation, the table foregoing table 10 per cent represented the cost, in 1899, of the railway transportation necessarily involved in placing the goods at the locations where they were required for concommodities required, at the higher prices and the nominally somewhat higher railway which follows shows the proportion which the cost of the same amount of transportation bore to the cost of the same quantity of commodities in each later year.

PERCENTAGE OF PER CAPITA COST REQUIRED FOR TRANSPORTATION.

4	4	_
95	100	9.03 10.16 9 8.78 10.33 10 7.18 9.16 10 9.08 8.86 10

The foregoing shows that the prices of the commodities represented increased so much more rapidly than railway rates that, if the quantity of transportation bore the same proportion to quantity of commodities in 1903 that it bore in 1899, the cost of transportation would have been but 9.03 per cent of the value of the commodities instead of 10 per cent of that value as in 1899. FARM PRODUCTS WILL BUY MORE RAILWAY SERVICE. The following

table, based upon farm prices as shown in the Yearbook of the Department of Agriculture for the year 1903, shows the values per unit of different farm products and farm animals, and the amount of transportation, both passenger and freight, purchasable for a single unit of each:

RAILWAY RATES AND FARM PRICES

	TIND	PRICE PER UNIT	R UNIT	MILES OF	OF RAI	SS OF RAILWAY TRANSPORTATION ABLE FOR THE PRICE OF I UNIT OF COMMODITY INDICATED.	E OF 1 I		РОВСИАВ- ТНЕ
	MEASURE			For	For 1 Passenger	nger	For 1	For 1 Ton of Freight	Freight
		1899	1903	1899	1903	In- crease	1899	1903	In- crease
Jorn	Bushel	\$ 0.303	0	15	21	Per cent	1	10	Per cent
v heat	do.	.584	.695	30	35	16.67	18	91	12.35
3arley	do.	.403		20	23	15.00		609	7.44
3uckwheat	do.	.510		26 28	27	3.85		71	1.43
otatoes	do.	.390		20	31	55.00	4.4	800	48 15
1ay	Ton	7.27	9.08	368	453	23.10	1,004	1,190	18.53
fules	Facu	37.40	67.93	1,891	3,386	79.06	5,166	8,903	72.34
filch Cows	do.	29.66	29.21	1,499	3,932	66.27	6.210	10,338	66.47
Other Cattle	do.	22.79	16.32	1.152	814	3	3.148	2,020	(E)
neep.	do.	2.75	2.59	139	129	(a)	380	339	<u>a</u>
1083	do.	4.40	6.15	200	307	30 90	800	900	00

WHEAT WILL BUY MORE RAILWAY SERVICE.

The farm prices used in the following table are those reported by the United States Department of Agriculture (Year Book 1903, p. 601) and the average rates per bushel on wheat shipped from Chicago to New York over the all-rail routes are those shown in the Statistical Abstract for 1903 (pp. 403 to 409) follows:

WHEAT RATES AND PRICES.

Year	Average farm price per bushel	Average rate per bushel Chicago to New York, all-rail	Number of bushels transported from Chicago to New York for the price of one bushel
1899 1900 1901 1902 1903	Cents 58.4 61.9 62.4 63.0 69.5	Cents 11.13 9.09 9.02 8.75 8.89	5.25 6.82 6.91 7.20 7.82

It appears from the foregoing that the price of wheat was lower in 1899 than in every one of the four years which followed, and that the railway rate charged for moving a bushel of wheat from Chicago to New York was higher in 1899 than in any succeeding year. Comparing farm prices with rates, it appears that one bushel in every 5¼ was required to pay the cost of transportation from Chicago to New York in 1899, while in 1903 one bushel would pay the cost of transporting more than 7¾ bushels.

changes in wages, taken in connection with changes in railway rates, have produced a condition by which the railways now have to perform more service in order to pay the average day's wages of their employees than they did at the average wages and rates of 1899; or, reversing the proposition, the average day's labor will now purchase more transportation than in 1899. The following table shows the different classes of railway employees, the number in each class, the total wages paid to that class in 1903, and the number of miles which a ton of freight had to be moved in 1899 and in 1903 in order to pay for one day's labor of each kind. The concluding column shows the increased percentage of service which RAILWAY RATES AND WAGES. Just as the receipts from railway service will purchase less of commodities, and just as commodities will purchase more railway service, had to be performed to pay for one day of each kind of labor.

EMPLOYEES	NUMBER ON	TOTAL WAGES	TON-MIL	TON-MILES REQUIRED TO PAY FOR 1 DAY'S LABOR	ID TO PAY
		CORT DIVINO	In 1899	In 1903	Increase
					Don cont
Station agents	34,892	\$21,011,724	240	245	2 08 108
Engineers	52,993	64.173.825	514	526	9.33
Firemen	56,041	37,494,283	290	299	3 10
Conductors	39,741	39,932,537	432	443	9.10
Other trainmen	104,885	66.221.636	268	284	7.02
Machinists	44,819	33,414,954	316	358	800
Carpenters	56,470	35,526,545	280	287	2.50
Other shopmen	154,635	84.133.168	238	244	9.20
Section foremen.	37,101	21.430.984	232	233	43
Other trackmen	300,714	103,426,685	163	272	5.50
Telegraph operators and dispatchers	30,984	19.962.487	267	273	9.02
Employees account floating equipment	7,949	5.032,788	261	277	6.13
All other employees and laborers	168,430	84,203,290	232	232	(a)
Total	1,089,591	\$615,964,906			

a No change.

From the foregoing it appears, among other things, that in order to pay for one day's labor on the part of the average station agent a ton of freight had to be carried 245 A DAY'S LABOR WILL BUY MORE RAILWAY SERVICE. The purchasing power of labor in general is indicated by the following table, in which the statistics of wages are from the reports of Commissioner of Labor Wright:

GENERAL WAGES AND RAILWAY RATES.

	WAGES PER HOUR		MILES OF RAILWAY SER- VICE PURCHASABLE WITH 1 HOUR'S EARNINGS			
OCCUPATION	1899	1903	For 1 passenger		For 1 ton of freight	
			1899	1903	1899	1903
Blacksmiths Boiler Makers Bricklayers Carpenters. Compositors. Hod Carriers Iron Molders. Laborers, general. Machinists. Painters. Plumbers. Stonecutters. Stone Masons	Cents 27.37 26.54 45.97 28.39 40.86 25.18 25.63 14.57 24.17 28.92 36.84 35.94 37.19	Cents 29.62 28.48 54.71 35.94 44.67 28.63 30.36 16.76 27.09 34.50 43.71 42.25 44.86	13.3 13.4 23.2 14.2 20.7 12.7 13.0 7.4 14.6 18.6 18.2 18.8	14.8 14.2 27.3 17.9 22.3 14.3 15.1 8.4 13.5 17.2 21.8 21.1 22.4	36.4 36.7 63.5 39.2 56.4 34.8 35.5 20.1 39.9 50.9 49.6 51.4	38.8 37.3 71.7 47.1 58.5 37.8 22.0 35.2 45.2 57.3 55.4 58.8

It appears from the foregoing that the average black-smith earned 27.37 cents per hour in 1899 and 29.62 cents per hour in 1903. At the passenger rates of 1899 his hour's earnings in that year would buy 13.3 miles of railway transportation. In 1903, although passenger rates had slightly advanced, his earnings had advanced so much more rapidly that for an hour's labor he could obtain 14.8 miles of travel. At the freight rates of 1899 and the rates of wages then prevailing the average hour's earnings of the same blacksmith would have been sufficient to pay for carrying a ton of freight 36.4 miles, but at the wages and rates of 1903 his hour's labor would have paid for mov-

ing a ton 38.8 miles. Similar results are seen throughout the table; the increase in the purchasing power of some kinds of labor being much greater than of the examples noted.

RATES NOT EXCESSIVE. The Chairman of the Interstate Commerce Commission, Hon. Martin A. Knapp, does not believe that there is any ground for the charge that railway rates are excessive. In his statement before the Senate Committee on Interstate Commerce on March 18, 1898, he said:

"In the first place, as Senator Elkins says, the question of excessive rates—that is to say, railroad charges which in and of themselves are extortionate—is pretty nearly an obsolete question. I would not affirm that there are not such rates; yet, broadly speaking, there are not many such. Those are not the rates of which the public complain. That is not the burden of the complaint."

THE RETURN ON RAILWAY INVESTMENTS.

The report of the Statistician to the Interstate Commerce Commission contains a "combined income account of the railways of the United States, considered as a system," on page 74 of the Report for 1903, from which it appears that the actual net payments on account of capital were as follows:

PAYMENTS ON ACCOUNT OF CAPITAL.

Net interest on funded debt	\$268,830,564
Interest on current liabilities	9,060,645
Net dividends	166,176,586

Γotal..... \$444,067,795

It appears, therefore, that \$11,146,151,265 of railway capital earned for its owners \$444,067,795, or 3.98 per cent per annum in the exceedingly prosperous year 1903. Surely this is not to be regarded as a high return, especially in view of the fact that much of the capital included had previously been for many years utterly unremunerative.

WAGES. Far the larger portion of railway expenditures consist of the wages and salaries of employees. It is true that the rates of wages paid have largely increased during the last few years, but no one has been heard to contend that any class of railway labor is overpaid. The following table shows aggregate wages and salaries for each year since 1895, their relation to operating expenses, and, to answer a familiar criticism, the amounts and the proportion of the total paid as salaries of general officers:

WAGES AND SALARIES

3		WAGES AND SALARIES		SALARIES OF GENERAL OFFICERS		
YEAR	OPERATING EXPENSES	Amount	Per cent of operating ex-penses	Amount	Per cent of Total Wages and Salar's	
1903 1902 1901 1901 1899 1898 1897 1896	\$1,257,538,852 1,116,248,747 1,030,397,270 961,428,511 856,968,999 817,973,276 752,524,764 772,989,044 725,720,415	\$775,321,415 676,028,592 610,713,701 577,264,841 522,967,896 495,055,618 465,601,581 468,824,531 445,508,261	60.56 59.27 60.04 61.03 60.52	\$14,244,121 13,090,284 13,141,428 13,157,420 12,964,442 12,632,224 12,304,161 12,497,957 12,234,686	2.15 2.28 2.48 2.55 2.64 2.67	

RAILWAY INCOME AND WHAT BECOMES OF

IT. During the twelve months which ended with June 30, 1903, the railways of the United States received for moving persons and property \$1,900,846,907, and had in addition a net income from investments of \$49,896,729, making a total of gross receipts equal to \$1,950,743,636. This seems like a tremendous sum, as it undoubtedly is, but very little of it went to the owners of the shares of railway corporations. In fact, the amount distributed to shareholders was actually but

\$166,176,586, or \$8.52 in every \$100.00 of the gross income. The distribution of the gross receipts of 1903 is shown below:

	AMC	PER CENT OF TOTAL		
To employees and dealers: Wages and salaries Fuel for locomotives Other operating expenses	\$775,321,415 146,509,031 335,708,406	\$ 1,257,538,852	39.74 7.51 17.21 64.46	
To creditors: Interest on funded debt Interest on floating debt	\$268,830,564 9,060,645	277,891,209	13 .78 .47 14 .25	
To the general public: Taxes Permanent improvements Miscellaneous	\$57,849,569 41,948,183 44,681,341	144,479,093	2.97 2.15 2.29 7.41	
To preserve the properties: Salaries, etc., on leased lines	\$430,427 5,000,000 99,227,469	104,657,896	.02 .25 5.09	
To the owners: Dividends on stock Total	\$166,176,586	166,176,586 \$1,950,743,636	8.52	

RAILWAY EMPLOYEES AND RAILWAY PROS-PERITY. The consequences of railway prosperity and depression can always be traced in the number of railway employees and the wages paid to them. The depression in the railway business which continued through the fiscal years from 1894 to 1898, inclusive, kept the number of employees at the lowest possible limit, while the renewed activity that began in 1899 is expressed by a growing augmentation of the ranks of railway labor. The following table shows the number of railway employees and the number per 100 miles of line on June 30, 1893, and every later year for which the data are available:

NUMBER OF RAILWAY EMPLOYEES.

Year	Total	Per 100 miles of line
1893	873,602	515
1894	779,608	444
1895	785,034	441
1896	826,620	454
1897	823,476	449
1898	874,558	474
1899	928,924	495
1900	1,017,653	529
1901	1,071,169	548
1902	1,189,315	594
1903	1,312,537	639

The amounts paid in wages and salaries to railway employees are not available for years prior to 1895. The increase between 1895 and 1903 was from \$445,508,-261 to \$757,321,415, or nearly 70 per cent.

RAILWAY CAPITALIZATION. The total railway capitalization on June 30, 1903, the latest date for which the statistics are available, as reported by the Statistician to the Interstate Commerce Commission, was \$12,599,990,258, but this aggregate includes \$2,318,391,953 in par value of railway securities held in the treasuries of railway companies and thus the basis of other issues of securities. Part of this duplication was offset, however, by the exclusion from the capital account of \$864,552,960 of current liabilities. Allowing for these items, the capital account stands as follows:

RAILWAY CAPITALIZATION

Stock not owned by railways	\$4,357,235,824
Bonds not owned by railways	4,906,661,409
Miscellaneous obligations	640,704,135
Income bonds	234,016,821
Equipment trust obligations	142,980,116
Current liabilities	864,552,960

Total.....\$11,146,151,265

Note—Since this table was placed in type the Bureau of the Census of the United States Department of Commerce and Labor has issued a report prepared by Prof H. C. Adams, Statistician to the Interstate Commerce Commission, which shows that the commercial value of the railway property in the United States is \$1,244,852,000.

There is a great deal of loose talk concerning overcapitalization, much of which is merely the repetition of estimates which, in the rapid progress of the last decade or two, have lost their last shred of intelligent basis. The general policy of paying for the improvements necessary to keep their properties up to the state of efficiency essential to meet modern conditions out of earnings and making no capital charge therefor has really destroyed the last vestige of "water" in the capitalization of the American railway system as a whole.

RELATION OF CAPITALIZATION TO MILE-

AGE. In 1880 there were 87,800 miles of railway in the United States and 20,300 miles of third track, fourth track, yard track and sidings. The average capitalization per mile at that time, that is, per mile of main-line first track, was:

Capital stock		*\$27,700
Bonds (all funded	debt)	25,400

In 1903 there were 207,000 miles of main-line first track, 17,000 miles of second, third and fourth track, and 61,000 miles of yard and side tracks. The average capitalization per mile, that is, per mile of main-line first track, was:

Capital stock		 .*\$21,050
Bonds (all funded	debt)	 23,700

While in these years the total first track main-line mileage increased 124 per cent, the mileage of total track increased 164 per cent, and the mileage of second, third, fourth, yard and side tracks increased 284 per cent. This vastly increased efficiency per mile of railroad together with better ballast, heavier rails, additional signaling and other safety appliances, the enormous improvement in the size and capacity of locomotives and cars, and wast increase in their number, more commodious stations and terminals was accompanied by a decrease in average capitalization per mile of line.

It is evident from this exhibit that whatever water may at some time in the past have been in any of the securities of any American railroad company, the capitalization of the American railroad system as a whole to-day contains no water. It has been so effectually squeezed out that so eminent and impartial an authority as President Hadley, of Yale, but recently made the statement that the railways of the United States could not be duplicated for their present capitalization. Out of the revenue of the American railroads there comes no undue sum for payment of interest on securities.

* These figures do not include shares and securities of one railroad that are held by another. Such inclusion, as usually made, exaggerates the real capitalization.

"DIVIDENDS AND INTEREST DO NOT INCREASE RAILWAY CHARGES. "It is now pretty well understood that fixed charges do not directly affect rates; nor do dividends affect them, except in so far as a road which is paying very high dividends may reduce rates lower than it otherwise would, in order not to tempt new capital into the field."—President A. T. Hadley, Railroad Transportation, p. 265.

RAILWAY STOCK WHICH EARNS NOTHING.

Even in 1903 no less than 43.94 per cent of the outstanding railway stock paid no dividends and those who held a goodly portion of the dividend-paying stock of that year had to average their receipts over many previous years in which they had received nothing. Even as late as 1897 the proportion of non-paying stock was 70.10 per cent of the total. The following statement shows these facts for each year covered by the reports of the Interstate Commerce Commission:

STOCK NOT PAYING DIVIDENDS				Average rate
YEAR	Amount	Proportion of all stock	Amount paid in divi- dends a	paid on dividend- paying stock
1903 1902 1901 1900 1899 1898 1897 1896 1895 1894 1893 1892 1891 1890 1888	\$2,704,821,163 2,686,556,614 2,828,991,025 3,176,609,698 3,275,509,181 3,570,155,239 3,761,092,277 3,667,503,194 3,475,640,203 3,066,150,094 2,859,334,572 2,807,403,326 2,654,258,391 2,811,526,552 2,621,439,792	Per cent. 43.94 44.60 48.73 54.34 59.39 66.26 70.10 70.17 70.06 63.43 61.24 60.60 59.64 63.76 61.67	\$196,728,176 185,391,655 156,735,784 139,597,972 111,009,822 96,152,89 87,110,599 87,603,371 85,287,543 95,515,226 100,929,885 97,614,745 91,117,913 87,071,613 82,110,198 80,238,065	Per cent 5.70 5.55 5.26 5.23 4.96 5.29 5.43 5.64 5.35 5.04 5.35 5.04 5.38

a Large portions of the aggregates shown in this column were paid to railway corporations; the actual totals paid to private investors were much lower than those shown.

Even in 1903 the dividend rate on all of the stock outstanding was but 3.20 per cent. and that on stock in private hands but 3.81 per cent.

RAILWAY BONDS WHICH EARN NOTHING.

Statistics reported by the Interstate Commerce Commission show that a part of the funded debt of the railways of the country has always been forced to go without its interest. Happily this is now a small portion of the total. The following figures are official. The last column in the table is based upon a comparison of the total interest accrued with the total funded debt outstanding.

FUNDED DEBT AND INTEREST.

	FUNDED DEBT NOT PAYING INTEREST a		Interest	Average rate of interest on all funded		
YEAR	Amount	Proportion of all bonds	accrued dur- ing year	debt out- standing b		
	1	Per cent		Per cent		
1903		4.33	\$283,953,124	4.41		
1902	294,175,243	4.89	274,421,855	4.49		
1901	361,905,203	6.23	262,094,838	4.46		
1900	378,937,806	6.78	252,949,616	4.48		
1899	572,410,746	10.45	251,158,087	4.55		
1898	852,402,622	15.82	246,126,691	4.53		
1897	867,950,840	16.59	247,880,230	4.70		
1896	860,559,442	16.26	249,624,177	4.67		
1895	890,561,460	16.71	252,512,920	4.69		
1894	914,757,607	17.29	252,779,523	4.72		
1893	743,015,132	14.39	250,176,887	4.79		
1892	777,719,420	15.56	240,074,895	4.75		
		1		1		

a Exclusive of equipment trust obligations.

b Including interest on equipment trust obligations.

NECESSITY FOR THE INVESTMENT OF MORE

CAPITAL. Although in the last twenty years there has been a marked increase in the intensive development of the American railroads, in the provision of airbrakes, improved signals and other safety appliances; in the erection of larger and better arranged stations,

yards and terminals, it is evident that the increasing density of population in the older portions of the country makes still further investment in this direction imperative and that the growing needs of the less thickly settled regions for increased and improved transportation facilities necessitate the application of additional capital. It is especially in the remote and undeveloped regions of the United States that the railroads in the past have been obliged to foster industry by fixing rates at the lowest possible level so as to enable the marketing of products. If the fixing of rates is to be made a governmental function, such regions will necessarily suffer most and into them there will no longer be the free flow of capital for development which is encouraged by freedom in rate-making. At the beginning of the era of railroad transportation the principal countries of Europe were already supporting a dense population, largely the inhabitants of towns and cities that were but short distances apart. Their railroads therefore almost from the beginning were of complete and substantial construction. The rights of way were bridged at grade crossings or sunken and walled in. The stations were commodious, and often of stone. The scale of expenditure necessary to accomplish these results is evidenced by the capitalization of the railroads of the principal European countries which at this time is approximately as follows per mile:

England	\$280,000
France	126,000
Germany	103,000

The current capitalization of the American railroads is approximately \$53,000.00 per mile. When the era of railroad transportation began there was in the United States but a small population and it was scattered over vast areas. If the railroads were to be built at all it was necessary that they be built cheaply.

RAILWAY PROSPERITY AND QUALITY OF SERVICE. During the lean years which followed the panic of 1893 the railways were compelled, in consequence of depleted revenues, to curtail their expenditures for labor and to reduce the number of their employees. In spite of the considerable decrease in traffic movement which permitted some reduction in the number of trainmen and others directly engaged in the movement of trains and traffic it was inevitable that the greatest reduction should be in the numbers assigned to the maintenance of roadbed, structures and equipment. Between June 30, 1893, and the same date in 1894, the railways were compelled by adverse circumstances to reduce the number of their employees from 873,602 to 779,608, a net reduction of 93,994, or 10.76 per cent. The distribution of this reduction among the different classes of employees was as follows: 40,481 men were taken from the number assigned to the maintenance of track, roadbed, and structures, a reduction of 15.94 per cent in a branch of the service which had required the labor of 29.33 per cent of all railway employees; 23,490 men were taken from the maintenance of equipment, a reduction of 13.39 per cent in service which had employed 20.09 per cent of the men in the service, and the balance from the services of conducting transportation and general administration. In other words, the work of keeping roadbed, track and structures up to the normal standard, although it had required less than one-third of the aggregate number of workmen, suffered 43.45 per cent of the reduction, while maintenance of equipment, which had given employment to one-fifth of the total, suffered one-quarter of the reduction. Together these manitenance services had occupied the labor of 49.42

per cent of the employees, but from their ranks was taken 67.37 per cent of the reduction. The number of men employed in these various branches of service per hundred miles of line in 1893, 1894, 1895 and every alternate year thereafter appears below:

EMPLOYEES PER 100 MILES OF RAILWAY LINE.

	ENGAGED IN					
YEAR	Mainte- nance of way and struct- ures	Mainte- nance of equip- ment	Con- ducting transpor- tation	General adminis- tration	Unclass- ified	Total
1893 1894 1895 1897 1899 1901 1903	151 123 128 134 153 176 211	103 86 88 88 96 105 124	234 208 204 206 223 245 281	21 18 18 17 18 20 22	5 8 4 4 5 2	515 444 441 449 495 548 639

The panic of 1893 also caused a temporary curtailment of the relative amounts of money expended for keeping up the quality of way, structures and equipment. In 1893 the expenditures for these purposes amounted to 36.98 per cent of all operating expenses, but in the following year they were reduced to 35.07 per cent. The total reduction in the expenditures for operation between 1893 and 1894 amounted to \$96,506,977, and of this reduction the maintenance services indicated contributed 51.36 per cent. The expenditures for maintenance of way, structures and equipment and their proportion to the total cost of operation in 1893, 1894, 1895 and every alternate year thereafter appear as follows:

YEAR	AMOUNT	PER CENT OF ALL OPERATING EXPENSES
1893 1894 1895 1897 1899 1901	\$306,134,285 256,563,912 257,765,053 282,196,761 331,330,055 421,356,162 506,851,516	36.98 35.07 35.52 37.49 38.67 40.88 40.31

RAILWAY OWNERSHIP DIFFUSED. Small as are the percentages of return upon railway investments in general there are those who, hastily assuming that this class of property belongs to a limited number of very wealthy persons, would willingly see the average return to investors still further reduced. doubt a fact that the progressive concentration of railway control under a few great corporations and closely allied financial interests has been confused, in the popular mind, with an actual concentration of ownership. In other words, multitudes of otherwise intelligent people are so misled by their conception of the artificial, State-created entities known as "corporations," that they fail to perceive that they are but the agencies of the millions of natural persons who are the real owners of all corporate property. Even a hasty and incomplete investigation of the ownership of railroad property shows by statistics of unquestionable accuracy that the actual beneficial interest in the railways of the country is widely diffused. A single railroad, the Illinois Central, has 9,123 shareholders, of whom 7,174 own less than 100 shares each, their average holding being less than 23 shares. A recently published table relating to this company merits reproduction. It is as follows:

ILLINOIS CENTRAL RAILROAD COMPANY—DISTRIBUTION
OF SHARES AS REGISTERED ON THE COMPANY'S BOOKS AT THE CLOSE OF BUSINESS, SEPTEMBER 29, 1903.

Holdings	Number	Shares of	Per cent	Average
	of	\$100	of	holdings
	stock-	each	entire	in
	holders	held	capital	dollars
1 to 90 shares	7,174	164,989	17.36	\$2,299.82
	391	39,100	4.11	10,000.00
	1,281	270,581	28.47	21,123.64
	38	19,000	2.00	50,000.00
Total of small holdings. 501 shares and upwards.	8,884	493,670	51.94	5,556.84
	239	456,714	48.06	191,093.72
Total of all holdings	9,123	950,384	100.00	\$10,417.45

The average annual income of the 8,884 small holders from a 6 per cent dividend is but \$333.41, while the largest holders among them would receive but \$3,000 each yearly from their investments. The latest data on the subject of stockholdings are contained in the report of the Interstate Commerce Commission submitted on February 24, 1905, in response to a resolution of the Senate. This report (Senate Doc. No. 138, 58th Cong., 3d ses.) shows that there are no less than 327,851 shareholders of record of American railway corporations. As this includes many fiduciary holders who represent large bodies of individuals and some holding companies whose own shares are widely distributed, the real aggregate is doubtless much greater.

[&]quot;It has been said without contradiction that a reduction in the earnings of the railroads amounting to 1 mill per ton per mile would extinguish all possibilities of dividends, and a reduction of one more mill would extinguish all possibility of interest."—David Willcox, before Senate Committee on Interstate Commerce.

promises of high returns. They seek safety and stability with the highest return compatible with both. Savings banks have invested very largely in railroad securities, as is shown by the following table, in which statistics compiled from the latest reports of the banking departments of the six States named are presented: banks of the country are before all else the depositories of the poor and the moderately well-to-do. Their millions of patrons can not directly avail themselves of the investment DEPOSITORS IN SAVINGS BANKS AS RAILWAY OWNERS. The savings opportunities open to their wealthier neighbors, nor afford to assume the risks implied by

STATE	NUMBER OF DEPOSITORS	TOTAL	RAILROAD (STEAM) SECURITIES OWNED-a	PER CENT OF DEPOSITS
New York. New Jensbine. New Hampshire. Massachusetts. Connectiout. Maine.	2,365,583 242,605 159,956 1,723,015 474,548 209,011	\$1,131,281,943 76,316,793 66,140,710 608,415,409 220,597,198 75,107,203	\$177,444,223 20,334,178 23,746,521 113,397,287 82,265,024 25,166,853	15.69 26.64 18.64 35.90 37.29 25.51
Total	5,174,718	\$2,177,859,256	\$442,354,086	20.31

a Book values

From 30 States whose public records do not disclose them, the facts have been secured by private inquiry. They appear below, necessarily somewhat fragmentary and incomplete, and undoubtedly showing less than the actual ownership of railway securities.

SAVINGS INSTITUTIONS.

	All rail-	securities owned, book value,	:	010 461 500	110,000	2,235,214	22,030	196,700	211,420	28,479,318	355,730		140,350	420,000		141,000	26,110	\$128,677,191
CURITIES.	Railway	shares owned, book value.				\$185,116	14 000	27,200		2,064,138	10,080		3,750	132,587	:		51,000	\$2,528,854
BANKS OWNING RAILROAD SECURITIES	Railway	bonds owned, book value.		Ø19 GR1 500	110,000	2,050,098	22,030	169,500	211,420	26,415,180	345,650		136,600	78,945,117		141,000	26,110	\$126,148,337
KS OWNING 1		Amount of Deposits.		#165 590 975	1,575,000	7,440,036 6,434,554	216,335	4,810,371	6,384,951	71,185,418	α - 5,833,483 1,052,240		9,383,000	3,170,682		2,037,751	134,252	\$482,939,407
BAN		No. of Depositors		915 118	6,000	27,714 33,073	1,175	14,724	19,091	187,690	α- 20,713 1,812		37,455	381,391		3,650 515	403	b-1,099 036
		No.	:	: 0	-	C1 C1	:	. 6	:"	313	403	:		10	: :		:	109
BANKS NOT OWNING RAILWAY SECURITIES.	For which complete data were supplied.	Total Deposits.	\$491,608	90 049 619	504,583		300,000 325,788 66,389,196	6,193,667	958,000 2,038,680	1,155,307	792,923	1 951 710	17,898,242	5,236,119	1,635,195	4,474,389	1,327,420 2,928,138	\$243.223.864
SECURITIES.	hich complete	No. of Depos- itors.	5,157	58 494	2,196		7,737	20,220	7,650	5,047	4,026	2,580	71,025	15,830	3,500	3,535	18,312	765,812
S NOT	For v	No.	8	96		: :	-00	203	00 00 1	127	13	00 4	* #	:0	0 01	03.70	:410	483
BANE	No. not	ing fur- ther infor- ma- tion.	× -	120	-	:03		101	oo :	57	: 9	63	:77	25 00 1		oo ≠1	-0121	261
No. of	an- swers not	fing in- for- ma- tion.	00	06	: :	:0	:00	37	• :·	- 6	:00	:	:03	> 03	- :		o : :	29
	No.	swers re- ceived	101	27.50	9	3× -4 4 1	25 00 10	451	O 44	22.42	24.8	20 4	99	200	3 8	2 11	- t- 00	1.016
		STATE.	Alabama	Arkansas	Colorado	District of Columbia	Florida Georgia	Indiana. Iowa.	Kentucky	Michigan	Minnesota	Nebraska	Ohio	Pennsylvania	South Carolina.	Urginia.	Washington West Virginia	Total

Combining the results secured from both public and private sources we have the

SAVINGS INSTITUTIONS.

PER CENT OF DEPOSITS	36 20.31 26.64	21.46
RAILWAY (STEAM) SECURITIES OWNED-A	\$442,354,086 128,677,191	\$571,031,277
TOTAL	\$2,177,859,256 482,939,407	\$2,660,798,663
NUMBER OF DEPOSITORS	5,174,718	6,273,754
-	Six States, complete	Total

a Book value.

It is worth noting that the average amount to the credit of each of the 6,273,754 separate accounts represented by the foregoing summary is but \$424.12, and that of the security for each average deposit 21.46 per cent, or \$91.02, depends upon railway property. This means that there are upward of 6,000,000 owners of railroad property whose separate holdings amount to barely \$91 each.

LIFE INSURANCE COMPANIES AS RAILWAY OWNERS. The life insurance companies of the country constitute the largest class of investors in railroad property. Through them vast numbers of American citizens protect their families against the financial difficulties that too often add want and privation to the natural sufferings that inevitably attend death. Through them the dependent members of millions of families are the actual beneficial owners of hundreds of millions of railroad property. There is one form of life insurance which appeals exclusively to wage-earners, and other persons whose incomes are very moderate. It is known as "industrial" insurance, because it is mainly in the ranks of the manual workers that it finds its patrons. Six companies now write policies of this class, and their policy holders number no less than 13,789,186, while the aggregate of their policies is \$1.894.811.287. These companies own bonds of steam railroads to the amount of \$50,236,742 and shares to the value of \$2,011,294. They hold as collateral for loans railroad bonds worth \$1,124,645 and shares worth \$605,600. The following table includes all classes of life insurance: LIFE INSURANCE COMPANIES.

(Those authorized to do business in Massachusetts.)

Number of policy holders:

Industrial	4,358,196 13,789,186
Total	18,147,382
Amount of policies in force: Ordinary Industrial	\$9,121,600,341 1,894,811,287
Total	\$11,016,411,628

Railroad securities owned: Shares, number	432,126
Shares, book value	\$48,661.655 619,601,241
Total, book value	\$668,262,896
Railroad securities held as collateral: Shares, number	259,670
Shares, market value	\$21,878,199 24,503,084
Total, market value	\$46,381,283

The assets of the companies represented in the foregoing statement aggregate \$2,128,131,253, so that the railroad securities owned, excluding those held as collateral, amount to 31.40 per cent of the total security for the payment of their policies.

FIRE INSURANCE COMPANIES AS RAILWAY OWNERS. The total wealth of the American people is estimated by the Bureau of Statistics in the Department of Commerce and Labor at \$94,300,000,000. Much of this aggregate consists of real estate and other property which from its nature is not subject to the risk of destruction by fire or not insurable against fire losses. Yet the fire insurance companies have now in force fire policies in the aggregate amount of \$26,083,-790,625. Who can doubt that the protection afforded by these policies is so widely diffused as to include all but an insignificant proportion of the owners of insurable property? Who can doubt that this protection extends to almost all the farmhouses and small homes of the country? The railroad securities owned and held as collateral by these fire insurance companies are shown as follows:

Amount of policies in force	
Shares, book value	\$30,157,552 . \$3,545,341
Total, book value	. \$113,702.893
Railroad securities held as collateral: Shares, number	. 13,897
Shares, market value	\$1,074,881 674,871
Total, market value	. \$1,749,752

Note.—The data in this table and paragraph are from the reports of those fire insurance companies which are authorized to do business in the State of Massachusetts. These doubtless include all the larger companies but not all of the smaller companies of local operation.

When it is realized that the aggregate assets of the companies included in the foregoing statement amount to \$393,148,697, it must be evident that the security which they afford would be seriously impaired by any successful attack upon railroad values. Leaving out of the account bonds and shares of the market value of \$1,749,752, which they hold as security for loans, the railroad bonds and shares, of which these fire insurance companies are the actual owners amount to 28.92 per cent of their entire assets. It follows that of the \$26,083,790,625 which represent the fire risks covered by policies in these companies no less than \$7,543,432,249 depend upon the stability of railroad values.

ACCIDENT AND GUARANTY COMPANIES AS RAILWAY OWNERS. Accident insurance and guarantee and bonding companies are large owners of rail-

way securities. The following data relate to companies of this class:

(Those authorized to do business in Massachusetts.)

Railroad securities owned: Shares, number	54,408
Shares, book value	\$4,840,662 10,915,587
Total, book value	\$15,756,249
Railroad securities held as collateral: Shares, number	1,740
Shares, market value	\$30,815 5,150
Total market value	\$25.065

EDUCATIONAL INSTITUTIONS AS RAILWAY OWNERS. The educational institutions of the United States have received many donations of large and small amounts which make up a vast aggregate. This wealth they hold as trustees for the present and future generations of the young men and women of America. Upon these foundations must be created a structure whose strength and symmetry will measure the future intelligence, progress and prosperity of the American people. The stability of this foundation is largely bound up with the stability of railroad investments It has been ascertained that seventy-four institutions of learning, nearly all of them colleges or universities, but including a few secondary schools, hold greater or less amounts of railroad securities. Of these, sixtyseven own bonds, and thirty-four own stocks; some, of course, owning both. The following data summarize the results of this investigation:

EDUCATIONAL INSTITUTIONS.

Number represented	74
Total endowments	\$142,242,079
Railroad bonds owned	
Railroad shares owned	4,087,009
Total railroad securities owned Proportion of railroad securities to	47,468,327
total endowments, per cent	33.37

These valuations of the railroad securities are, with insignificant exceptions, those of the respective treasurers in their balance sheets.

RECAPITULATION OF RAILWAY OWNERSHIP DATA. A recapitulation of the data in regard to insurance companies follows:

ALL CLASSES OF INSURANCE COMPANIES.

	RAILWAY SECURITIES							
	Owned	Held as collateral	Total					
Shares, number	767,992	275,307	1,043,299					
Shares, value Bonds, value	\$ 83,659,869 714,062,169	\$22,983,895 25,183,105	\$106,643,764 739,245,274					
Total	\$797,722,038	\$48,167,000	\$845,889,038					

The extent in which the business life of the nation is based upon railroad values and the diffusion of railroad ownership may be summarized, so far as they are disclosed by these investigations, by the following table:

VALUE OF RAILROAD SECURITIES HELD.

By the insurance companies	\$845,889,038
By the savings institutions	571,031,277
By the educational institutions	47,468,327
J viio outomoral misoroutoms	11,100,021

Total......\$1,464,388,642

Who can doubt that complete returns from these three classes of institutions would show that they hold much more than two billions of railroad property?

GENESIS OF THE INTERSTATE COMMERCE LAW. The original Interstate Commerce law was adopted in 1887, after fifteen years of more or less continuous discussion, in and out of Congress. records of Congressional debates and the public press of the period contain a very complete record of the causes which inspired the public demand for this legislation, and there is no difficulty in ascertaining precisely what they were. The advocates of legislative action objected (1) to railway pooling, (2) to rebates and secret discriminations among shippers, (3) to charges which they deemed to be too high and (4) to alleged injustice in the relations among different rates. Of all these objections that against rebates and secret discriminations was unquestionably the strongest and there is ample reason for believing that without it there would have been no legislation. The law adopted made the pooling of traffic or earnings unlawful and all of the pooling contracts then in existence were at once abandoned. There has been no resumption of the forbidden practice. The new law also prohibited rebates or secret discriminations and established what the Congress which passed it clearly regarded as ample machinery for enforcing the prohibition. But this portion of the law was less effective than that against pooling and for two reasons. These reasons were (1) certain defects in the law which were not completely remedied until the adoption of the Elkins law in 1903, and (2) the unwillingness of the Interstate Commerce Commission, the agency created to enforce the law, to give proper attention to this portion of its duty. Although the first obstacle to

the enforcement of the law against rebates was wholly removed by the Elkins law the second remains. Commission still prefers outwardly to assume the dignity of a judicial tribunal-although in practice departing far from the true standard of judicial impartiality—to the more humble but more useful function of vigorously prosecuting offenders against the law that it was created to enforce. In the language of Judge Grosscup the Commission "has put on the robes when it ought to have worn the overalls." The unanimous testimony of those who know the truth is that rebates and personal discriminations; in their usual forms, became obsolete on the passage of the Elkins law and have remained so. If there are still occasional instances of the subtler forms of unjust preference it is because the Commission has refrained from utilizing the great powers entrusted to it. The law can be enforced as it stands so as to punish and prevent every possible form of rebating. If there were excessive rates prior to 1887 they long ago disappeared. The loudest advocates of radical legislation do not contend that such rates now exist. are lower in the United States than anywhere else in the world, and on most kinds of traffic so low as to affect but slightly, if at all, the prices of the articles carried. And they are growing lower every day. Unjust discriminations between places and kinds of traffic have been illegal since 1887, if they were not before, under the Common Law. Whenever the Interstate Commerce Commission has reason to believe that any discrimination forbidden by law is being practiced it can appeal to any Circuit Court of the United States, having jurisdiction, to enjoin that discrimination. In such a case the court has full power to forbid the illegal rates and to enforce its prohibition. But although it is more than two years since the Supreme

Court upheld the validity of this law the Commission has not yet, in a single subsequent case, appealed to any court for such a decree. Either there are no such discriminations in existence, or those affected have not thought them worth bringing to the attention of the Commission, or the Commission has been grossly derelict in performing its duty. The existing law is complete and ample. There can be no real case of injustice which can not be promptly and fully corrected if the authorities promptly and fully perform their duties. If the Commission will not enforce the present law how can it be expected to enforce any other law?

REBATES NO LONGER GENERAL. In his annual message to Congress of a year ago (transmitted on December 7, 1903), the President declared concerning the statute for the further regulation of railways, adopted in February, 1903, known as the Elkins law:

"The Congress * * * has secured equal treatment to all producers in the transportation of their goods, thus taking a long stride forward in making effective the work of the Interstate Commerce Commission."

The testimony of the Interstate Commerce Commission, as given in the annual report which it submitted to Congress on December 17, 1904, is that:

"As to that branch of regulation which deals with the publication and invariable application of tariff rates, the act as amended by the Elkins law of February 19, 1903, appears to be operating successfully as applied to carriers subject to its provisions. * * *"

Mr. E. P. Bacon, who is the chief legislative agent of those who wish to confer rate-making authority upon the Commission, on December 9, 1904, while addressing the Committee on Interstate and Foreign Commerce of the House of Representatives, was asked whether he had "heard of any proceedings against the railroads in the matter of rebates." He replied as follows:

"I have not heard of any occasion for proceedings. It (meaning the Elkins law of February 19, 1903) has been so generally observed by the railways since its passage that there has been no occasion for prosecution."

During the same hearing, and also with reference to the Elkins Act, Mr. Bacon said:

"That * * * has been productive of immense good. It has been surprising, in fact, to me to what an extent that bill has been complied with by the transportation companies, and in fact our committee has been unable to trace any violation of that bill of any consequence. There have been some devices for defeating it by the establishment of side tracks, which are called railroads, so that on a division with the railroads they get an undue proportion, and by that means obtaining personal discrimination, personal favors, and personal advantages. But the Commission, after hearing some cases in that direction, have already taken steps to prevent that evasion of the law."

By whatever device accomplished, a rebate is vicious in principle and demoralizing in practice. It is fortunate that it offends the American spirit of fairness, that it is so wholly obnoxious to the people that its condemnation is as certain and as general as it deserves. Rebates from interstate freight charges have been illegal for but eighteen years, and the laws against them have been strengthened from time to time as opportunities for their perfection have been indicated by experience. If they are not as effective as the laws against burglary and arson, the fact may be set down as, principally, evidence of the slow growth of higher moral ideas amidst the struggles of the market place. Further strengthening of these laws should be wel-

comed and will be welcomed whenever it is clear that the changes suggested are likely to produce the results desired. No railway officers are opposed to such legislation.

THE LUST OF POWER. The efforts of the Interstate Commerce Commission to secure additional authority have been persistent and systematic. There is no doubt that they have had a powerful influence upon public opinion which would have been impossible had the official source of the agitation been apparent. The following extract from the official record of the proceedings of the Commission shows that what some have supposed was a spontaneous outburst of public sentiment was really a carefully contrived exhibition of the power of a skillfully conducted machine for the manufacture of such an appearance of public support as, it was hoped, would force Congress to enact the anti-railway legislation desired by the Commission. The records of the Commission for December 8, 1900, contain the following:

"Co-operation with certain mercantile organizations to secure the adoption of amendments to the act to regulate commerce being under con-

sideration.

"It was unanimously voted to instruct the Secretary to co-operate with the representatives of these organizations for the purpose of securing the adoption of necessary amendments, and particularly the passage of a bill which has been approved by such organizations at a meeting held in Chicago on November 22, 1899, and to that end to give the public information as to the present state of the law, and the necessity for amending it by distributing such reports, papers and documents as are designed to accomplish that purpose, and to devote himself assiduously to such duty."

Among the acts of the Secretary, Hon. Edward A Moseley, in pursuance of the foregoing resolution was

the wide dissemination of an appeal to boards of trade, commercial organizations and others to bring pressure upon Senators and Congressmen to force them to vote for the bill favored by the Commission.

This appeal was signed officially by Hon. Edward A. Moseley, the Secretary of the Commission, who formally stated in regard to it that his action was taken "simply as executive officer of the Commission." Thus a great official body, maintained at the cost of the tax payers of the United States and for a definite purpose, used its power and its resources to maintain an energetic lobby and a persistent literary bureau for the purpose of securing legislation antagonistic to a portion of the tax-paying public.

ENVIRONMENT'S SUBTLE INFLUENCE. The manner in which local associations and friendships are certain to affect the ablest and most honest Government officers, if they are given the power to make railway rates, was well illustrated by the order of the Interstate Commerce Commission in the Maximum Rate case. The Commissioner who wrote the opinion in this case formerly resided at Rome, Georgia. The rates were reduced by the order to both Rome and Atlanta, but very much greater reductions were made to Rome than to Atlanta. This is shown as follows:

RATES IN CENTS PER ONE HUNDRED POUNDS FROM CINCINNATI, OHIO, TO

Class	ROME, GEORGIA			ATLANTA, GEORGIA		
of Freight	Old Rates	Rates Ordered	Reduc- tion Per cent	Old Rates	Rates Ordered	Reduc- tion Per cent
1 2 3 4 5 6	107 92 81 68 56 46	75 64 54 44 34 24	29.91 30.43 33.33 35.29 39.29 47.83	107 92 81 68 56 46	86 73 60 45 35 27	19.63 20.65 25.93 33.82 37.50 41.30

No reasons for these differences were given in the decision, or, have ever been given by the Commission. The order was declared unlawful by the Supreme Court, but had it been enforced there is no doubt that the merchants of Rome would have gained a great deal of business at the direct expense of Atlanta merchants and would have had cause to feel greatly indebted to their former fellow-townsman.

SENATE DOCUMENT NO. 257. It is probable that no erroneous statement has ever been more frequently repeated, more widely disseminated, or more generally accepted than the assertion made by the Interstate Commerce Commission in Document No. 257, issued April 7, 1904, that the railways collected \$155,475,502 more freight revenue in 1903 than they would if the rates of 1899 had been continued in force. Among the various items of misinformation which have acted upon the public mind and operated to create whatever general anti-railway sentiment now exists, none has been more profoundly influential than this. It seizes the imagination by giving definite magnitude to a charge that had previously been general and indefinite. rather startling, then, to learn that this estimate was derived through unwarranted methods of calculation from figures which do not accurately portray the facts, and therefore is erroneous and deceptive. This is the more startling when it is realized that the correct figures had been published in the Commission's own reports. Thus it was calculated (Doc. 257, p. 8) that the rate received per ton of freight carried during the year that ended with June 30, 1899, was 95.2 cents, but if the Commission had used the correct figure, to be found on page 96 of the report of its Statistician for the year 1899, it would have appeared that the rate was substantially two cents higher, being actually 97.131 cents.

Again it appears (Doc. 257, p. 4) that the average rate per ton which was used for the year 1903 was \$1.0793, although the annual report of the Statistician to the Commission for that year shows (p. 97) that the actual average was \$1.05158. The result of these improper, erroneous, and deceptive calculations was to give a figure substantially two cents too low for the first year and one quite 234 cents too high for the last year, a total difference, superficially favorable to the Commission's argument, of nearly five cents per ton. The mere substitution of the correct figures, as they appear in the reports of the Statistician to the Commission, for the erroneous figures that were calculated especially for the purposes of Document No. 257, reduces the apparent increase of freight earnings of \$155,475,502 to \$98,047,874. The following table shows in parallel columns the average rates per ton used in Document No. 257 and the correct figures as they are to be found in the successive annual reports of the Commission's own Statistician:

AVERAGE RATE PER TON.

YEAR	FIGURES IN DOCUMENT No. 257	CORRECT FIGURES a	PAGE OF STATISTI- CIAN'S RE- PORTS
1899 1900 1901 1901 1902 1903	\$0.9520 .9524 1.0269 1.0058 1.0793	0.97131 .97530 1.05116 1.03219 1.05158	96 95 91 93 97

a See Statistician's reports for same years.

No one who examines the foregoing table will fail to appreciate the fact that the misleading figures used by the Commission tended, apparently, to aid its argument. In the following, the table given by the Com-

mission on page 8 of Document No. 257 is reproduced and in parallel columns are the correct figures which would have been used had the table been based upon the correct and easily accessible averages:

> NUMBER OF TONS OF

FREIGHT

CARRIED

YEAR ENDING JUNE 30 TOTAL FREIGHT REVENUE
AS CHARGED

The correct

As given by the

	OARNI 25		nmission	figures	
1900 1901 1902	959,763,5 1,101,680,226,4 1,200,315,7 1,221,475,9	38 1,04 40 1,11 87 1,20	3,737,155 9,256,323 8,543,014 7,228,845 8,320,604	\$ 932,227,966 1,074,468,736 1,144,951,265 1,238,953,952 1,284,479,677	
	AMOUNT OF FRE REVENUE AT AVE RATE PER TON O	RAGE	INCREASE		
YEAR END- ING JUNE 30	being the average rate for the year ending June 30, 1899, as given by the	31 cents ng the age rate the year ading 30, 1899, correct gures	As given by the Com- mission	The correct figures	
1899 1900 1901 1902 1903	1,048,799,587 1,070 1,036,943,571 1,053 1,142,700,629 1,168	2,227,966 0,073,032 7,976,533 5,878,727 6,431,803	\$ 456,73 81,599,4 64,528,2 155,475,5	86,974,732 16 73,075,225	

RAILWAY RATES HAVE NOT ADVANCED

The charge that railway rates have been raised rests upon estimates made by the Interstate Commerce Commission in its Fourteenth Annual (1900) Report, upon the report of the Industrial Commission (Vol. XIX, p. 281) and upon the special report to the Senate submitted by the Interstate Commerce Commission on

April 7, 1904 (Senate Doc. 257, 58th Cong., 2d ses.). These estimates have been widely disseminated and the fact that they are all erroneous in principle has naturally failed to receive the public attention which it ought to have. In its annual report for 1900 the Commission discussed the then recent changes in the great freight classifications and this discussion was repeated with but minor changes in the final report of the Industrial Commission. The only material difference was that while the Interstate Commerce Commission only suggested that if "rates can be advanced 25 per cent," the ingenuous author of the Industrial Commission's report boldly plunged into direct statement and asserted that there had been an advance in the published rates of the railways of "probably not less than 25 per cent." The Industrial Commission admitted that its claim was not supported by the average rates per ton per mile earned by individual railways and that many of these averages showed decreases. But it alleged that they were generally vitiated by including in the calculations large amounts of "company freight," which moves free. The amount of this class of freight had been exceptionally heavy and it was claimed that its inclusion diminished the later averages so that they were not comparable, as representing rates actually paid, with those of earlier years. The only trouble with this argument is that it is not based upon a correct premise. "Company freight" is not included in the ton-mileage which is divided into freight receipts in order to determine average rates per ton per mile. No important railway employs this deceptive method and the instructions for filing the schedules filed annually with the Interstate Commerce Commission have the effect of excluding ton-mileage of this character from representation in the averages reported. The efforts of the Interstate Commerce Commission and of the

Industrial Commission to sustain the allegation that there had been a great advance in freight rates followed substantially the same plan. On January 1, 1900, a new Official classification was promulgated by the roads north of the Ohio and Potomac and east of the Mississippi rivers. It modified 824 of the ratings established by the classification which it succeeded and, of the changes made, 818 were advances from one class to another. This classification is applicable to traffic between Chicago and New York, unless, as in the case of grain, live stock and dressed meats, special commodity rates are provided. It contains about 10,000 items, hence not to exceed 8½ per cent of the total were advanced. The Interstate Commerce Commission, however, utterly ignored the unchanged items, and applying the New York-to-Chicago rates to the items that had been transferred, multiplied each percentage of increase by the number of items to which it applied, and dividing the sum of the products by 818, the total number of advances, obtained 35.5, which it declared to be the "average advance." Now, this is about as bad a misuse of figures as could be devised. It not only ignores six items which were reduced and more than 9,000 which were not changed at all, but it also rests upon the obviously incorrect assumption that the traffic movements of all the items are equal in volume. The latter error would vitiate any calculation. Its extent is suggested to those in any way familiar with traffic movement, by the fact that at least 85 per cent of the changes in the Official classification related to the comparatively insignificant traffic that moves in less than carload lots. Passing over this error, however, it will be instructive to see how the calculation would stand if all of the items in the classification had been included. This is shown in the table which follows:

	NUMBER	EXTENSION
Items advanced 35 per cent Items reduced 30 per cent Items reduced 14.3 per cent Items not changed	818 3 3 9,176	29,039 90 42.9
Total	10,000	28,906.1

Average change 2.89 per cent.

Thus a very simple and obviously necessary correction does away with all but 2.89 per cent of this advance of 35.5 per cent which has been exploited by two Federal Commissions.

MISLEADING STATISTICS. In Document No. 257 the Commission compared the average earnings of the year 1903 with the lowest average earnings in the history of the American railway system. The average rate per ton-mile for the year 1899 was absolutely the lowest ever received in the United States, which means that it was the lowest for any country and at any time in the history of railway transportation throughout the world. If any other year had been selected as the basis of comparison the results would have been quite different. One year is as good as another for purposes of this sort and, in order to show how a different selection would have operated, a table based upon the year 1894 has been made. The first three columns in this table are identical with those which appear in the table prepared by the Commission (Doc. 257, p. 8), but in the heading of the fourth column the average gross receipts per ton carried shown in the annual report of the Statistician to the Interstate Commerce Commission for 1894 (p.71), is used, and in the same column, in the body of the table the aggregate gross receipts which would have been obtained had this average prevailed in each of the years indicated in the column at the extreme left are shown. The last column at the right shows how much less was received in each of the years than would have been received at the average of 1894. Aggregating these figures, it appears that through reductions from 1894 to 1903 American shippers by rail saved in a single year \$536,664,859, which may be set against the fictitious and exaggerated total of the apparent losses through increases from 1899 to 1903 given by the Commission, which total is \$302,059,897. Thus it appears that in comparison with the rates of the year 1896, railway earnings on the freight business of 1903 decreased \$234,604,962 more than they increased in comparison with the rates in 1899.

Year ending June 30	Number of tons of freight carried	Total freight revenue as charged	Amount of freight at aver- age rate per ton of \$1.0252, being the aver- age rate for the year ending June 30, 1896	Decrease
1899 1900 1901 1902 1903	959,763,583 1,101,680,238 1,089,226,440 1,200,315,787 1,221,475,948	\$913,737,155 1,049,256,323 1,118,543,014 1,207,228,845 1,318,320,604	1,214,624,496 1,200,393,935 1,325,372,161	

THE COMMISSION'S MISFIT REPLY. While Document No. 257 was issued ostensibly as a response to a resolution of the Senate it did not respond to any resolution ever adopted, but did respond to one which failed of adoption. Important facts called for in the resolution which was passed were omitted, while, as shown elsewhere herein, improbable estimates were resorted to in order to include matters concerning which no inquiry had been addressed to the Commission. The resolution which was introduced, probably at the request of some member of the Commission, but never adopted and that which was actually passed appear in parallel columns below, the former being

correctly designated as the one responded to by the Commission:

NOT ADOPTED. This resolution was answered.

Resolved. That the Interstate Commerce Commission is hereby directed to furnish the Senate as speedily as may be practicable, a report showing the principal changes in railway tariff rates, whether resulting from the adoption of new rates or the amendment of freight classifications, and an estimate of the effect of such changes upon the revenues of railway corporations in the United States during each of the fiscal years ending June 30, 1900, 1901, 1902, and 1903, as compared with the revenues that would have been derived by them under the rates and freight classifications in force during the fiscal year ending June 30, 1899. And that said Commission also include in such report such estimate as may be practicable of the effect of such changes in rates and freight classifications upon the revenues of said railway corporations derived from the transportation of leading commodities, for example, iron and steel articles, coal, lumber, grain, flour, hay, and sugar, during the periods above mentioned.'

ADOPTED. This resolution was not answered.

Resolved. That the Interstate Commerce Commission is hereby directed to furnish the Senate as speedily as may be practicable, a report showing the principal changes in railway tariff rates, whether resulting from the adoption of new rates or the amendment of freight classifications, and an estimate of the effect of such changes upon the gross and net revenues of railway corporations in the United States, during each of the fiscal years ending June 30, 1900, 1901, 1902, and 1903, as compared with the gross and net revenues that would have been derived by them under the rates and freight classifications in force during the fiscal year ending June 30, 1899; and also report the changes in cost of operation and maintenance of said railways for said years

The words in italics in the resolution that was not adopted, as printed above, were omitted in the resolution as finally passed and those printed in italics in the latter were not in the former. Yet Document No. 257 replies to all the ultimately omitted inquiries of the unadopted resolution and affords no answer to the inquiries added to the resolution that passed. The Commission's "Preliminary report on the income account of railways," for the fiscal year 1903, is dated December 12, 1903, and shows that the operating expenses of "about 98 per cent" of the railway mileage of the country for the fiscal year 1903 was \$1,248,-520,483, or \$391,551,484 more than the cost of operating all the railways in 1899. Yet the Commission, while inserting in Document No. 257, which is dated March 24, 1904, figures for freight tonnage and earnings which cover but 98 per cent of the existing mileage, failed to include the expenses of operation for 1903, asked for by the resolution, and explained the omission by the statement that they had "not yet been compiled."

HAY. The Commission contends, in Document 257 that, although data regarding the traffic movement of particular commodities are very meager, it is possible to obtain from them estimates of the importance of advances on certain articles which, to quote the language of the Commission, "while considerably at variance with the actual figures, were they obtainable, will give a fair idea as to the increase in revenue resulting from an advance in rates on such articles." The probable extent of the "variance" from actuality and the Commission's comprehension of a "fair idea" may be given definite value by an examination of the process by which the report arrives at the conclusion that advanced rates on hay cost the shippers, in Official classification territory, of that article, \$2,434.384

during the fiscal year 1902. The Commission's estimate starts with the fact that the railways of the United States carried 4,681,509 tons of hay during the year which ended with June 30, 1902. It is assumed that sixty-five per cent of this tonnage moved in Official classification territory and that the advance amounted to eighty cents per ton. The assumption that sixty-five per cent of all hay moved by rail during the year was affected by the advance in this territory rests solely upon the fact that sixty-five per cent of the general tonnage originates in this region. But so strangely did the Commission misuse its own figures that it ignored the fact that the very page of its statistical report for 1902 which shows that about sixty-five per cent of all tonnage originating in Official classification territory also shows that only 32.65 per cent of "products of agriculture," of which hav constitutes a subclass, originates in that region. Again, the estimate that the advance amounted to eighty cents per ton is in contradiction of sworn testimony of experts to be found in the Commission's records to the effect that the advance did not, on the average, exceed forty cents per ton. Supplying these corrections we have:

ITEMS	The Commission's estimate	The correct figures
Number of tons of hay carried in the United States in the fiscal year 1902	4,681,509 65.00	4,681,509 32.65
Official classification territory Average increase in rates per ton carried Increased revenues from hay	3,042,980 \$0.80 \$2,434,384	1,528,513 \$0.40 \$611,405

Thus a reasonable estimate of the effect of the advance in question, an advance that has subsequently received the approval of a Circuit Court of the United States, indicates that it actually produced but little more than one-fourth of the revenue which the Commission erroneously estimated. The same methods of analysis show that the Commission's estimate that since January 1, 1900, the increased revenue due to the advance in hay rates amounted to "nearly \$10,000,000" ought to be reduced to less than \$2,500,000. But assuming the Commission's figures to be correct, it is worth while to see what the situation of the producer of hay was as compared with his situation before the rate was advanced. The United States Department of Agriculture carefully investigates the farm values of all the principal agricultural products at the close of each year. These investigations show that hay, on the farms of the United States, was worth to its producers an average of \$6.00 per ton in 1899, and had advanced by December 1, 1901, to \$10.01 per ton. Thus the farmers gained by increased prices a great deal more than they would have lost even had the imaginary increase in freight charges reported by the Commission been actually taken entirely out of their pockets. The following table shows the difference between the imaginary losses and the real gains:

YEAR	Commission's estimate of tonnage affected by increase in rates	Loss to pro- ducers had they paid all of an ad- vance in freight of eighty cents per ton	Gain to producers on account of higher prices than those in effect just before rates were advanced	Excess of real gain over imaginary loss				
1900 1901 1902	2,672,860 2,656,355 3,042,980	\$2,138,288 2,125,084 2,434,384	\$ 3,394,532 7,676,866 12,202,350	\$ 1,256,244 5,551,782 9,767,966				
Total	8,372,195	\$6,697,756	\$23,273,748	\$16,575,992				

In other words, the increased prices of the three years, 1900, 1901 and 1902, made 8,372,195 tons of hay on the farms worth \$23,273,748 more than at former prices, which is an actual increase in value 3.47 times as great as the Commission's imaginary increase in the cost of railway freight. The hay crop of 1899 in the United States exceeded in volume that of either 1900, 1901, 1902 or 1903, but the records of the Department of Agriculture show that the crop of each of the later years greatly exceeded that of 1899 in farm value. The augmentation of the value of their hav crops to the farmers of the United States on account of higher prices and notwithstanding diminished production amounted, from 1900 to 1903, inclusive, to \$402,438,899. By the side of this vast sum an advance in freight of forty cents per ton on one-third of the hay moved by railways appears insignificant.

DOCUMENT No. 257 UNFAIR. Unless it was for the purpose of obtaining, regardless of an accurate basis of measurement, the highest statement that could be put forth of the alleged advance in rates it is impossible to discover any adequate reason for the abandonment by the Interstate Commerce Commission, in the preparation of Document No. 257, of the customary measure of traffic movement, which is the ton-mile. To state the traffic movement of any period in ton-miles is to give a figure in which, distance as well as weight is accorded recognition. The distance factor varies: between 1899 and 1903 the average distance traversed by the tonnage used in the Commission's estimate increased from 128.85 miles to 132.80 miles, or 3.07 per cent. To ignore the increased service per unit of weight, as the Commission did when it chose the uncertain and varying ton unit of service, is to leave distance out of the account although it is clearly

a factor of primary importance. The total railway freight movement of 1903 was equal to carrying 173,221,278,993 tons one mile. The average railway receipts from freight per ton per mile was 7.63 mills, or 0.39 mill higher than in 1899. Multiplying the ton-mileage of 1903 by this difference between the average rates of 1899 and 1903 gives \$67,556,299, which is the extreme amount that can be assigned as an addition to the gross receipts of the railways by reason of the nominally higher average rate obtained in 1903.

THE COMMISSION'S DUTY TO DECIDE ON THE FACTS. The Interstate Commerce Commission. under the present law, has authority to make findings of fact that will not be set aside unless palpable error can be shown. If it would stop trying to legislate and issue lawful orders based on facts properly found, there would be no further demand for new legislation. Nothing is plainer than the tendency of the courts to throw back upon the Commission the burden of ascertaining and interpreting the facts in regard to complaints; and the conclusion that its findings are those of an especially expert body, entitled to great weight and not too rigidly to be reviewed or criticised or lightly to be thrust aside, is plainly to be read in many of the very decisions in which the Commission's orders have been rejected.

The Supreme Court, said in the Social case, that:

"The reasonableness of the rate in a given case depends on the facts, and the function of the Commission is to consider these facts and give them their proper weight."

In the Import Rates case it declared, with reference to the conclusions "reached by the Commission,

or by the courts below, in respect to what were proper rates," that "That was a question of fact, and if the inquiry had been conducted on a proper basis we should not have felt inclined to review conclusions so reached." The Commission has so conducted its work that in one of the latest cases decided, the Kearney case, the Circuit Court was fully justified in stating that the Commission had failed to make any finding of fact which would sustain its order.

EVADING ITS DUTY. The Interstate Commerce Commission has persistently shirked its legal duty to investigate minutely the facts pertaining to cases brought before it. It has preferred to attempt to enforce fantastic interpretations of the law. Thus has it created whatever sentiment exists in favor of radical legislation by demanding that the law be made to mean what it erroneously declared it did mean. In the Behlmer case (175 U. S. 648), the Supreme Court spoke of the Commission as follows:

"That body, from the nature of its organization and the duties imposed upon it by the statute, is peculiarly competent to pass upon questions of fact of the character here arising."

The foregoing was quoted by the Supreme Court in deciding the Chattanooga case (181 U. S., 1), and the court asserted that it had

"steadily refused * * * to exert its original judgment upon the facts, where, under the statute, it was entitled, before approaching the facts, to the aid which must necessarily be afforded by the previous enlightened judgment of the Commission upon such subjects."

In the Georgia Commission cases (181 U. S., 29) the Supreme Court found that the Commission had "postponed the performance of its duty" and had made no investigation of the facts.

THE COMMISSION DERELICT SAYS THE COURT. In its decision in the Nashville Coal case, rendered on April 17, 1896, the Circuit Court declared that the Commission is to be regarded as a body of experts in transportation problems and that:

"This gives to the Commission's finding and opinion great weight, and entitles it to great consideration, both by the parties affected and by the courts, when called upon to enforce obedience to its mandates."

But after voicing this opinion the court was compelled to say that in the case before it the Commission's report and findings did not lay before the court the definite and distinct information necessary, that it made but "a passing allusion" to "the main issue" of fact, and that, in consequence, the Commission's investigation and opinion could not have the value which conformity to the purpose of Congress would have insured.

THE COMMISSION DEFEATED REPEATEDLY IN THE COURTS. Forty-five cases in which the railways have declined to obey the orders of the Commission have gone to the courts. Some of them have been withdrawn; some have been prosecuted with so little diligence by the complainant, usually the Commission, that for years they have remained undecided, and there are a few which have been so lately entered upon the dockets that there has not yet been time for their consideration and determination. The number of cases which have been decided is 35, and in only two of these has a final decree enforcing the orders of the Commission been secured; in one other the Supreme Court decided to enforce a part of the Commission's order. In its response, dated May 1, 1905, to the Senate resolution of January 16, 1905, the Commission attempted to make the record appear more to its

credit and claimed to have had its orders sustained by the courts in three cases in which it decided that rates were excessive and in eight cases in which it decided that they were unjustly discriminatory. In order to make up the eight cases, however, the Commission included the three cases given under the first head, so that the real total claimed is eight and not eleven. But this is not all. Five of the eight cases can not properly be counted at all. In four of them there were no court decisions and in one other the decision was merely on a motion to dismiss and the merits of the case were never subjected to judicial investigation. These cases are included by the Commission because the defendant carriers saw fit, while they were pending, to take action satisfactory to the complainants. The absurdity of treating them as cases in which orders have been sustained by the courts is evident when it is noted that it resulted in including one order—that in the Colorado Fuel and Iron case—under both heads as having been both sustained and disapproved by the courts. In fact, this single order appears three times in the Commission's summary, and it is difficult to discover why it did not appear four times, for as it was counted under the respective heads of "excessive rates" and "unjust discrimination" among the "sustained" orders it is rather strange that the Commission thought it should be counted but once, under "excessive rates," among the orders "not sustained." In fact, the final decree of the Federal courts was against this order.

SOME CONTESTED DECISIONS OF THE COM-MISSION. Possibly some one may suppose that the decisions of the Commission which have been contested successfully in the courts have involved broad questions of elementary justice and that the legal impediments to the enforcement of these orders have interfered with the "square deal" essential to equality

of industrial opportunity. Reference to a few of the contested cases may show the falsity of this impression. Passenger rates have been the subject of controversy in but two of the cases in which the courts have been appealed to for the enforcement of the Commission's orders. One of these cases was that of a negro named Heard, who obtained an order from the Commission directing the Georgia Railroad to discontinue practices connected with the use of so-called "Jim Crow" cars, which were regarded as unjustly discriminating against the complainant. This case was withdrawn before decision. The other passenger rate case is known as the "Party Rate" case. It arose through the desire of one railway company to be relieved from one phase of its competition with a rival carrier. The order of the Commission would have mitigated the competition in the desired degree had not the court declined to enforce it. Three of the cases which have gone to the courts have related to transportation practices rather than to rates. One of these, the "Orange Routing" case, appears to have been due to an effort on the part of the complainants to secure the continuance of illegal and secret deviations from the published rate schedules, by parties other than the defendants, which amounted to rebates. At least this was asserted in the strong dissenting opinion of the Chairman of the Commission. The Circuit Court has decided this case in favor of the enforcement of the Commission's order, but an appeal is now pending. Another case of this character, the "Cartage" case, was prompted by the desire of one railway to weaken a competitor. In this effort the carrier was able to secure the co-operation of the Commission, but again its decision did not survive judicial scrutiny. The Circuit Court called attention to the admission of the counsel for the complainants before the Commission, that the complainant had no real griev-

ance but had been instigated in making complaint by a railway which was paying the expense of the litigation, and the Circuit Court of Appeals noted that the effect of enforcing the order would practically deprive the defendant of its ability to compete with the rival which was responsible for the complaint. Another of these cases was brought at the instance of a railway which desired to be relieved from a contract that it had entered into with other railways, and to force the latter to provide, at their own expense, facilities for bringing about that result. The Circuit Court, which refused to enforce the Commission's order, declared this to be the fact, and asserted that the Interstate Commerce law "was never intended to invade the domain of private contracts between common carriers. which were valid when made, and are not in conflict with the provisions of the law."

THE COMMISSION WRONG ON THE FACTS.

The attempted answer to those who recite the repeated reversals of the Interstate Commerce Commission by the courts is, in effect, that what the Commission has tried to accomplish ought to be accomplished, and that if the courts have properly construed the law, the law is wrong. This contention was recently stated with admirable clearness and conciseness by Mr. Commissioner Clements. Addressing the Committee on Interstate and Foreign Commerce of the House of Representatives on January 25, 1905, he said:

"* * * It is not fair to array these cases here as cases in which the court, upon the facts, upon the merits and equities and justice of the case, has overturned the Commission 29 or 30 times out of 35, when in reality these cases went off solely upon construction of the law, which demonstrated vital defects in this regulating statute."

The answer to this argument is to be found in the decisions themselves. A study of the opinions of the

courts in the thirty-two reversals which the Commission has sustained affords little support for the assumption that the conclusion would have been different in any one of them even had the Commission undeniably possessed the powers for which it now asks. With regard to many of them it is exceedingly difficult to see how any one who had given them careful study could reach the conclusion that they "went off solely upon construction of the law." This surely was not the reason for the reversal of the Commission in the San Bernardino case (50 Fed. Rep., 295), in which the court said that:

"The facts * * * are widely different from those set out in the report of the Commission."

Nor in the Coxe case (74 Fed. Rep., 784), in which the court expressed radical disagreement with the Commission as to the facts involved, saying:

"The Commission's estimate * * * rests upon an erroneous principle and is unreliable."

In many other cases, including the very recent Kearney case, it is clear that there would have been the same decision even under such a statute as that proposed. In the Kearney case the court said:

"It is to be observed further that while there is no finding of fact in this case upon which the order of the Commission can be based, the evidence itself is not believed to be sufficient to support the order. The evidence before the court, on the contrary, appears to be sufficient to support a finding that the Kearney rate in and of itself was and is reasonable."

Yet Interstate Commerce Commissioner Prouty told the Senate Committee on Interstate Commerce during the last week of its sessions that the Commission had never "been overruled by the Supreme Court of the United States on a question of fact." No doubt when the statement was made the Commissioner had forgotten that in deciding against the Commission in the Cattle Raisers' case (186 U. S., 320) the Supreme Court said:

"Being then constrained to the conclusion that the order of the Commission was not sustained by the facts upon which it was predicated, we can not enter into an independent investigation of the facts, even if it be conceded the record is in a condition to enable us to do so, in order that new and substantive findings of fact may be evolved, upon which the order of the Commission may be sustained."

Something like a disagreement with the Commission's view of the facts seems also to have been expressed by the Supreme Court when, in the Import Rate case, (162 U. S., 197), it said:

"The effort of the Commission, by a rigid general order, to deprive the inland consumers of the advantage of through rates, and to thus give an advantage to the traders and manufacturers of the large seaboard cities, seems to create the very mischief which it was one of the objects of the act to renedy."

LONG AND SHORT HAUL CASES. In most of the cases in which appeal has been unsuccessfully made to the courts to enforce its orders the Commission has attempted to control adjustments among freight rates. Roughly speaking, these are of two classes: Those in which the whole question has been that of absolute or relative reasonableness under the first or third sections of the act, and those in which the question has arisen under the fourth, or long and short haul clause, which considerably exceed the others in number. If in any of these cases there were unjust relations which might have been relieved through the lawful action of the Commission, that body adopted an erroneous interpretation of the law, which prevented the beneficial results that might have followed action clearly within

its authority. In many of these cases the courts have also indicated that the Commission's orders were not justified by the facts. The only case under the fourth section which can be regarded as an exception to this rule is the "San Bernardino" case-decided by the Commission while it adhered to the rule laid down by Judge Cooley, with the unanimous approval of his colleagues as members of the original Commissionthat the carriers must judge for themselves in each instance whether there are dissimilar circumstances and conditions which permit exceptions to the general rule that there shall be no higher charge for intermediate hauls than for longer hauls over the same line in the same direction, when the latter include the former. From its organization in 1887 until November, 1892, the Commission adhered to the rule just referred to, which was formulated in the first important case that arose under the fourth section. Later in deciding the Georgia Commission cases the Commission abandoned this rule, so far as it related to the competition of interstate railways located in the United States, and declared that where the dissimilarity of circumstances relied on to justify exceptions to the general rule were the consequence of such competition, dissimilarity could not be set up as a defense to a complaint of violation of the law, but must be made the basis of an application to the Commission for permission to make the greater charge for the intermediate haul. After adopting this interpretation of the law, the Commission for a number of years declined to consider evidence tending to prove the existence of dissimilar conditions arising out of the competition of interstate railway carriers or of different markets, thus preventing the introduction of testimony which the courts have declared to be of controlling importance. It is true that this erroneous interpretation of the law has

prevented the enforcement of the orders in some of these cases, but it is equally true that the Commission never expected obedience to them, and that they are to be regarded as strategic moves in a combat which the Commission proposed to conduct along the lines that it hoped would force the carriers to appeal to it for relief. There seems to be ample justification, not only in the case to which it was applied, but in most of these cases, for the observation of the Supreme Court. in deciding the Chattanooga case, that in making its order "the Commission thought that literal enforcement would bring about an injustice." In fact, before making some of them the Commission allowed an interval to elapse for the avowed purpose of permitting applications for relief, and it provided for the suspension of several of the orders after they were made in case such applications should be made. In many of these cases the courts distinctly expressed the view that there was no injustice in the rate relations which were made the subject of complaint, and that there can be no controversy over the suggestion that their enforcement would have brought injustice. There is probably no one of these cases in which the enforcement of the Commission's orders would directly have modified the rates actually paid. The carriers affected might have been compelled to withdraw their competition for the long-haul traffic, but it is not at all likely that in any case they could have afforded to reduce their intermediate rates to the level fixed by competition at the terminals. In a few more recent cases the Commission has recognized the illegality of its former efforts and has given what it has regarded as sufficient consideration to competition of the character formerly declared to be without effect as a defense. In these cases, however, the Commission appears to have fallen into the error of imagining that it was the purpose of the law to deprive

certain communities of natural advantages of location which enable them to enjoy the services of great and competing routes of transportation by land or by water, or by both. The Griffin case is typical. The court said that the enforcement of the Commission's order, would, as its first effect, "immediately disorganize and disarrange the entire commerce of which Macon is the receiving and distributing point," and that it would do this without material benefit to the producers and consumers at Griffin, although "the commerce of Macon would be destroyed in exact proportion with its ability to meet the prices of its competitors."

LAW AGAINST REBATES. All devices in the nature of rebates are absolutely prohibited by Federal law, and have been so prohibited for nearly eighteen years. The language of the statute is broad enough to cover any conceivable device, whether by underbilling, underweighing, false classification, excessive payments for the use of shippers' cars, unreasonable allowances to terminal railways or otherwise. The law on this subject was materially strengthened by the Elkins Act, approved on February 19, 1903, which reads in part as follows:

"* * * * and it shall be unlawful for any person, persons, or corporation to offer, grant, or give, or to solicit, accept or receive any rebate, concession, or discrimination in respect of the transportation of any property in interstate or foreign commerce by any common carrier subject to said Act to regulate commerce and the Acts amendatory thereto, whereby any such property shall by any device whatever be transported at a less rate than that named in the tariffs published and filed by such carrier, as is required by said Act to regulate commerce and the Acts amendatory thereto, or whereby any other advantage is given or discrimination is practiced."

Violation of the foregoing is a misdemeanor, punishable by a fine, which may not be less than \$1,000 nor more than \$20,000. In addition to these penalties the statute places in the hands of the Interstate Commerce Commission a most powerful instrument for the enforcement of the laws providing:

"That whenever the Interstate Commerce Commission shall have reasonable ground for belief that any common carrier is engaged in the carriage of passengers or freight traffic between given points at less than the published rates on file, or is committing any discrimination forbidden by law, a petition may be presented alleging such facts to the Circuit Court of the United States, sitting in equity, having jurisdiction; whereupon it shall be the duty of the court summarily to inquire into the circumstances upon such notice and in such manner as the court shall direct, and without the formal pleadings and proceedings applicable to ordinary suits in equity, * * and upon being satisfied of the truth of the allegations of said petition, said court shall enforce an observance of the published tariffs or direct and require a discontinuance of such discrimination by proper orders, writs and process. * * * *'

Thus "government by injunction" has been invoked in aid of the suppression of rebates.

SUFFICIENCY OF THE ELKINS LAW. The Commission's authority as extended by the Elkins law of February 19, 1903, is sufficient to eradicate every case of unjust discrimination from the published tariffs. By this Act it is provided, "That whenever the Interstate Commerce Commission shall have reasonable ground for belief that any common carrier * * * is committing any discriminations forbidden by law," application may be made to the proper Circuit Court sitting in equity which shall "direct and require a discontinuance of such discrimination by proper orders, writs, and process." An opportunity to declare the

evident and quite unmistakable meaning of the foregoing occurred with unusual promptness, and on March 9, 1903, deciding the case of the Missouri Pacific Railway v. United States (189 U. S., 274), the Supreme Court said:

"The violation of the Act to regulate commerce, complained of in the amended bill was an asserted discrimination between localities. * * * Bearing in mind that, prior to the request of the Commission upon which the suit was brought, no hearing was had before the Commission concerning the matters of fact complained of, and therefore no finding of fact whatever was made by the Commission, and it had issued no order to the carrier to desist from any violation of the law found to exist, after opportunity afforded to it to defend, the question is whether, under such circumstances, the law officers of the United States at the request of the Commission were authorized to institute this suit. * * * Power to prosecute a suit like the one now under consideration is expressly conferred by an Act of Congress, adopted since this cause was argued at bar-that is, the Act 'to further regulate commerce with foreign nations and among the States,' approved February 19, 1903 "

Yet the Commission has persistently ignored the machinery for the correction of unjust relations among rates thus placed at its disposal by Congress, and in its annual report for 1903, dated eight months after the decision just quoted was rendered, it declared that although the remedy by injunction was "in terms made applicable to any discrimination forbidden by law, it is at least doubtful whether it applies to discriminations which are the result of adhering to published rates." But two conclusions are possible to those who realize the extent of the powers now possessed by the Interstate Commerce Commission. Either it grossly overstates the extent of unjust discrimination in tariff

rates, or the prevalence of the evils which it proclaims should have led to the wise exercise of the power it has permitted to lie dormant. In other words, either the Commission and the other advocates of governmental rate-making misapprehend the present situation or the Commission has not done what it ought to have done. If this is so, it is not the law which has failed but its administration. And if the difficulty has been administrative rather than legislative, the reasonable course would seem to be to reconstruct the administrative agency rather than to reconstruct the law.

PRESENT EFFECTIVENESS OF THE COM-MISSION. The report submitted to Congress by the Interstate Commerce Commission in December, 1904, shows that from its creation on February 4, 1887, to December, 1904, it had received, all told, precisely 4,012 complaints against railway rates and railway methods. This is an average of something over 200 every year. But 3,223 of these complaints are classified by the Commission as "informal," and were settled under the existing law by its friendly mediation. In other words, in these 3,223 cases no formal complaint was received, no formal proceedings were instituted, no report and opinion was filed, no order issued, no litigation ensued; yet every one of them was settled to the mutual satisfaction of those concerned. The remaining 789 cases were formally presented to the Commission, but only 359 of them were pressed to final determination by that body. It is impossible to state just how many, but there are probably less than 70 of these cases still pending. In other words, almost half of the 789 formal complaints have been settled by agreement between the parties or by the withdrawal of the complaint before the Commission

has had time to investigate and decide. Of the 359 cases which the Commission has decided, frequently considering two or more of them together, and in its whole history having rendered but 297 formal decisions, 194, or scarcely more than one-half of the total, have been decided in favor of the complainants. The balance have been dismissed because there was no legal ground for complaint. In the 194 cases decided in favor of the complainants the Commission has, with a few exceptions, issued formal orders requiring the carriers to change their rates or to modify their regulations. Probably about 65 per cent of these orders have been promptly and voluntarily obeyed by the carriers against which they were directed. A report, submitted to the United States Senate by the Commission on December 21, 1896 (Senate Doc. No. 30, 54th Cong., 2d sess.), shows the action taken in 107 instances, in which the decision of the Commission was more or less favorable to the complainants. From this report it appears that in 58 of the 107 cases included there was complete, voluntary obedience to the Commission's order. In 11 more there was voluntary, partial obedience, while in another case the Commission reports that "some changes" were made. It is to be observed concerning these 12 cases that the degree of obedience was at least sufficient to prevent further action on the part of the Commission or the complainants. It appears, therefore, that in 107 cases there were only 37 in which the defendants declined substantially to comply with the Commission's recommendations. Information on this subject is brought to a later date by the statement supplied to Senator Kean by the Commission, and printed on pages 68 and 69 of the "Hearings Before the Committee on Interstate Commerce of the Senate," of April 19, 1905. This statement relates to 60 cases decided between

December 3, 1887, and June 25, 1904, "in which the Commission found rates complained of to be unreasonable and ordered them to be discontinued." It shows that in 26 cases the orders of the Commission were completely obeyed and that in 13 cases they were partially obeyed. As no suits were brought in any of the cases in which the obedience is described as "partial," the action may be presumed to have been satisfactory to the complainants. Of the 21 cases in which the orders of the Commission were not obeyed, suits had been brought, at the date on which the statement was made, in 19, and in 16 of these the courts had decided that there were no lawful orders, that the pseudo-orders issued had no legal force, and, in effect, that they ought not to have been obeyed. The decision in the Freight Bureau cases (167 U.S., 479), which the Commission always refers to as having established the interpretation of the law to the effect that the Commission has no rate-making power although this was in fact clearly decided more than a year before in the Social Circle case (162 U.S., 184) decided, on March 30, 1896, was decided on May 27, 1897. The following table shows that there has been more frequent and more complete compliance with the Commission's orders since that date than before.

ORDERS REQUIRING CHANGES IN RATES.

Issued	Num- ber- issued	Number completely obeyed	Number partially obeyed	Percent- age wholly or partly obeyed
Before May 27, 1897. After May 27, 1897	41 19	15 11	11 2	63 . 41 68 . 42
Total	60	26	13	65.00

We come, therefore, to this conclusion: That out of about 4,000 complaints of one kind and another

brought to the attention of the Commission, approximately 3,900 have been adequately and satisfactorily settled under the law as it exists to-day. Of the remaining 100 cases some are undoubtedly still pending, and if they shall be decided against the carriers it is reasonable to believe that in most cases the course recommended by the Commission will be promptly adopted by the defendants. The traceable remainder amounts to precisely 45 cases in which the Commission has rendered decisions adverse to the railroads, which the latter have refused or neglected to obey. In these cases the Commission or some party in interest has, in accordance with the procedure provided in the statute, sought the aid of the United States courts for the enforcement of the remedies prescribed by the Commission. These 45 cases constitute almost precisely 1.1 per cent of the total number of complaints which the Commission has received. Here, then, are the actual dimensions of the evil which it is proposed to remedy by conferring upon the political appointees of the President power to write into every contract for transportation-and of these contracts there are millions every day—the most important item in that contract—the price for which the transportation is to be performed. For the sake of 1.1 per cent of all the complaints received in connection with the greatest American industry save that of agriculture—and the 4,000 complaints of all kinds in eighteen years is to the total number of shipments about as 4,000 grains of sand to the seashore-for the sake of 45 cases in eighteen years of American industrial achievement, it is proposed to inject into American industry a new and an alien force and to deprive, by a single law, the shipper of the right to say how much he will pay and the carrier of the right to say how much he will receive. "THE LAW OF THE LAND." The law of the land is that when the Commission has conducted a lawful investigation and issued a lawful order which has not been obeyed by the carrier or carriers defendant, it is the duty of the Federal courts having jurisdiction to issue a decree commanding obedience. When suit is brought to enforce one of the Commission's orders there are only two questions before the court, and these are:

First. Has a lawful order been made by the Commission? and

Second. Has the order been disobeyed?

If the answers to both questions are in the affirmative, no discretion and no latitude of action is left to the court. It must require, by a proper decree, prompt and complete obedience to the Commission's order, and that order the court can neither modify, alter, nor abate. Sixteen cases of this sort have been brought to the attention of the Supreme Court of the United States and fifteen times that court has decided that the Commission has failed to make a lawful order and that consequently there was no order which the court could enforce. Twenty cases, in addition to these, have been decided by the lower Federal courts and eighteen of them adversely to the Commission.

A SUCCESSFUL STATUTE. "There appears to be a disposition in some quarters to discredit the present law and belittle the result of its operations. It has been described as a crude and ill-considered measure, which has made little advance toward the accomplishment of its intended purpose. I am very far from having any sympathy with that erroneous view. On the contrary, I regard the Act to regulate commerce as one of the most important and benefi-

cent statutes ever enacted by the Congress of the United States."—Testimony of Hon. Martin A. Knapp, Chairman, Interstate Commerce Commission, Testimony, Interstate Commerce Committee, U. S. Senate, Vol. IV, p. 3292.

LEGISLATION AS A PANACEA. anything goes wrong in the world, or seems to go wrong, the ignorant and thoughtless everywhere rise up and call upon the Government to interfere. as if a perfunctory body, made up of agents, loosely selected at best, were more trustworthy than the masses, from whom it derives life. Government interference is the sine qua non of young people, the hopeful, confiding, and simple. It is the panacea of cranks and schemers. It is never fully adequate. It lacks in intelligent interest, energy, and adaptability. It, moreover, has the effect to weaken personal interest and individual effort. Its substitution for private effort is to trade off the practical experience and enthusiasm of a nation for the service of hired men. * * * To invest Government with the authority to make rates, or actively to interfere with other business matters, is to make the creative, aggressive genius of a nation conform to the contracted sphere of mechanical action. Such a course is destructive. * * * The untrammeled operation of railroads is necessary to the freedom of trade, the interchange of commodities, the prosperity of business, the growth of a country. We can not wrap them in the cerements of mummies, or chain them to arbitrary conditions, and expect them to fulfill the vital and active functions of their office. If untrammeled they will effect the widest possible interchange of traffic between the markets of a country. We can not fix the rates they shall charge in accomplishing this end in the mechanical manner that we measure lumber or count the telegraph poles that line our public highways. They must be determined as exigencies arise, according to the equities of trade. The question is an economic one, and must be so

treated by Governments. Whenever Governments meddle in such affairs, their action (if designed to benefit mankind) will be exceedingly moderate. It will be suggestive rather than mandatory."— Marshall M. Kirkman, Basis of Railway Rates, pp. 217, 210, 213.

COMPLAINTS ARE INEVITABLE. In spite of the activity with which railway officers are constantly seeking to adjust the great agencies of commerce which they direct to the needs of American industry, it would be foolish to contend that changes are always made with the most desirable promptitude or that those which are made are always perfectly adapted to the situations they attempt to meet. Omnipotence alone could attain such a result. But the measure of the complaint which is heard ought not to be mistaken for the measure of the evil which exists. There is no shipper who would not like to have his goods carried for lower rates: there is no industry which would not like to have a greater share of the burden of maintaining the means of transportation shifted to other industries; there is no community or producing region which does not look jealously at some other community or producing region, wishing, in the race for commercial supremacy, itself to become the especial beneficiary of a particularly favorable adjustment of railway rates. New York, the great gateway of foreign commerce. looks covetously at the relatively small percentage of grain exports which, at a rate lower than New York enjoys, moves through the port of Philadelphia, and would like to have the charges to both ports equalized, while Philadelphia looks southward to Baltimore and sees no reason why the greater differential allowed her southern neighbor should not be vouchsafed to her. It would be possible to continue almost indefinitely the enumeration of rivalries of this sort which lead to

pressure upon railway officers for reductions and modifications in rates and occasionally to complaints, more or less justifiable, that these officers have failed to create the particular rate adjustments which would most promote industrial harmony and industrial progress. Such complaints are merely the expression of that economic unrest which requires constant and rapid improvement in all industrial relations and is the mother of all progress in productive industry.

MR. S. H. COWAN, ATTORNEY FOR THE TEXAS CATTLE RAISERS' ASSOCIATION, CONDEMNS THE ESCH-TOWNSEND BILL.

"I enclose you my objection to the Esch-Townsend bill. I hope you can place it before the whole committee and have it printed. The people will not stand for any such makeshift. I hope no bill will be passed if this is the best they can do."—Letter to Senator Elkins. See Testimony before the Committee on Interstate Commerce, U.S. Senate, Vol. I, p. 184.

"I sent my criticisms on that bill here. I think that bill would be practically worse than no law at all. I know a great many think otherwise, but if you transferred a retrial on the facts, like the case I have tried before the Commission, I would not give a snap for the law. It would be obnoxious and harassing to the railroads. * * * I filed a protest here because I believed it was an injurious measure."—Ibid., Vol. 4, p. 3400.

RAILWAYS OPPOSED TO REBATES. "Under the Elkins law, the Commission has, I think, full power to do away with all secret rebates. Tariffs of every railroad must be published, made open to the public, to the competitors of every such railroad, and be maintained. No law that Congress could pass, doing away with the secret concessions or, as they are ordinarily termed, rebates, could be too severe to satisfy the majority of the railway managers of this country."

—Letter of H. B. Ledyard, Chairman of the Board,
Michigan Central Railroad, Interstate Commerce Committee, U. S. Senate, Vol. II, p. 1432.

LET THERE BE NO FALSE PRETENCES. allegation in support of the proposed legislation, that there is unjust discrimination among purchasers of transportation, is seriously confused by the misleading use of the word "rebates." There is nothing in the Esch-Townsend bill that would affect rebates except that it is extremely probable should such a measure be enacted, it would increase the incentive to cut below the schedule rates. A rebate, using the word in its broadest sense, is any device by which one shipper of freight is afforded service for a smaller payment than is accepted from some other shipper for a like and contemporaneous service. The terms of the measures now under consideration make them wholly inapplicable to such discriminations. Their only purpose is to give rate-making power to a political body. Clearly it would be most unfortunate if the improper and inappropriate use of a term of such sinister suggestion as the word "rebate" should result in the enactment of unwise laws which could have no relation or application to the obnoxious practice to which that term properly applies.

WOULD ADD TO THE INCENTIVE FOR REBAT-

ING. The large degree of success that has been attained in the enforcement of the laws against rebating, and secret rate cutting is principally due to the fact that commercial causes have forced railway charges to so low a level that their officers realize that the losses incident to such deviations would be destructive of all profit. But if by unwise legislation the schedules are forced to a condition of rigidity such as would necessarily result from their being made and promul-

gated by a central Government authority, there will be much more temptation to grant rebates, and as even under present conditions the most drastic laws have not been sufficient entirely to eliminate these evils, it is reasonable to assume that under greater temptation they would increase in number. No law will prevent shippers from offering traffic at less than the legal rates, or when concessions are refused, from withholding it, or sending it forward, where possible, by carriers operating on rivers, canals, lakes or seas, or in adjacent foreign countries. No law will compel railway men to stand idly by while their locomotives rust in the roundhouses or their cars decay upon the side tracks because traffic is not offered at the rates fixed by the Government. If the existing set of railway men should decline to violate such a mandate, and the financial destruction of their properties should ensue, the certain and inflexible operation of the laws of business would soon bring in as their successors men who would meet the necessities of the situation. Again, the existence of an authority under which every public concession could be made a club to compel involuntary reductions, would increase the tendency to meet the necessities of trade by secret rate cutting. There would be more rebating under any system which lodged in any public body final authority to fix rates for the future than under the existing system.

A RIGID SYSTEM. "If you fix one rate to-day and another rate to-morrow, you presently have fixed a great many rates and if those rates can not be departed from without the consent of the Commission or a court that fixes the rates, you have got in fact a more or less rigid system of rates."—Testimony of Hon. C. A. Prouty, Interstate Commerce Commissioner, Testimony, Interstate Commerce Committee, U. S. Senate, Vol. IV, p. 2885.

THE PHILADELPHIA BOARD OF TRADE. The following are extracts from a report of the committee on inland transportation which was presented, read, and adopted at a meeting of the Board of Trade of Philadelphia, held on May 15, 1905:

"* * * The Interstate Commerce Legislation now in force prohibits undue and unreasonable discrimination in whatever way effected, whether by agreements with particular customers or by unreasonable compensation for the use of private cars, or by unreasonable pro rata allowances for terminal railroads, or by any other means whatsoever, for the offense is in the end and not in the No further legislation could increase the prohibitory operation of the law. All that is needed is a fearless enforcement of existing law, and for that the Interstate Commerce Commission has ample power, not only under the original Interstate Commerce Act, but also under the Elkins Act. * * * American railroads, while paying higher wages to labor and larger prices for materials, nevertheless charge lower rates for carrying goods than those of any other country. This result has been brought about by reason of the intelligent appreciation by railroad managers of the fact that it is more profitable to move a large volume of business at low rates than a small volume of business at high rates. If the power is given to the Commission to lower rates in their unrestrained discretion railroad managers will hesitate to reduce any rates, in fear that the Commission may so reduce other rates as to deprive the railroads of all profits. * * * The power proposed to be vested in the Commission will necessarily lead to the ultimate adoption of a fixed rate per mile per ton, which, when put into practice, will limit manufacturers and merchants to the markets of their own localities."

PORT DIFFERENTIALS WOULD BE ILLEGAL.

The Constitution of the United States declares that:

"No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another * * *."

If the Interstate Commerce Commission is given the rate-making power, its exercise will be governed by this limitation. The Constitution does not say undue or unjust preference, as does the Interstate Commerce law; it forbids all preference. Any difference in rates gives a preference to the port accorded the lower rate, but the preference is not undue, unless it is greater than is justified by differences in conditions. The Commission, however, would be obliged to forbid all preference, just and unjust alike, that is, all differentials. This would destroy the competitive export business of Philadelphia, Baltimore, Newport News, Norfolk, Charleston, New Orleans, Galveston and other southern ports.

ANY RATE AND ALL RATES. "It is useless to urge that the measures proposed at the present time do not include granting direct rate-making powers to the Commission. If the Commission is to be given power to redress what is wrong in rate-making, it is at least possible that any rate may soon be attacked and the Commission called upon to name the rate that shall hold."—Professor W. D. Taylor, of the University of Wisconsin, Review of Reviews, August, 1905.

JUDGE COOLEY ON OFFICIAL RATE-MAKING.

"The Commission would in effect be required to act as rate-makers for all the roads and compelled to adjust the tariffs so as to meet the exigencies of business, while at the same time endeavoring to protect relative rights and equities of rival carriers and rival localities. This in any considerable state would be an enormous task. In a country so large as ours and with so vast a mileage of roads it would be superhuman. A construction of the statute which would require its performance would render the due administration of the law altogether impracticable; and that fact tends

strongly to show that such a construction could not have been intended."—Hon. Thomas M. Cooley, First Chairman of the Interstate Commerce Commission, In re Louisville & Nashville Railroad, 1. Inter. Com. Rep. 280.

TO ABOLISH PORT DIFFERENTIALS. The Atlantic seaports south of New York, viz.: Philadelphia, Baltimore, Newport News, Norfolk, Wilmington, Charleston, Savannah, Brunswick, Jacksonville, Pensacola, Mobile, New Orleans, and Galveston are all competitive with New York and Boston for import trade. The southern ports named contend that, owing to various advantages enjoyed by New York, their business is dependent upon their ability to secure slightly lower inland rates than those to New York. This has long been admitted in practice by the railways, and the differences made in their favor have come to be known as differentials. Some of those who support the present effort to secure a new law do so because they believe it would result in the prompt abolition of these differentials and so enable Boston and New York to secure a much greater share if not in fact to monopolize the export trade of the country. In a speech before the Middlesex Club of Boston (see the Boston Daily Globe of January 21, 1905), Senator Lodge said:

"The movement is a movement for the equalization of rates. * * * It is a case of the rebates to individuals and of the differentials between points. * * * No railroad wants to give a rebate to anybody. * * * We have dealt somewhat with the question of rebates and individuals. They are comparatively easy to deal with, but when you come to the differentials between points you touch communities, and that is a very serious matter; and to-day New York and Boston are suffering from the railroad differentials, and are made to suffer for the benefit of points farther south."

IT IS GENERAL RATE-MAKING. The Esch-Townsend relates solely to the enlargement of the power of the Government over the rate schedules and not to the prevention of deviations from those schedules, which are accomplished by means of rebates. The Commission has described (in its Annual Report for 1904) the enlarged power which it seeks, as follows:

"What the Commission could do if the authority so defined should be definitely conferred by the Congress is this: After service of complaint upon the carrier or carriers, after full hearing of each carrier and shipper interested, and after careful investigation, a report and opinion would be rendered, and if the decision should be against the carrier an order would be entered directing it to cease and desist from charging the rate complained of and to substitute therefor a rate found, upon the evidence before the Commission, to be reasonable and just."

The foregoing is chiefly notable on account of the disengenuous use of the singular form "rate," instead of the plural form "rates," in describing the changes in the schedules which the Commission wishes to have power to make. In the case decided by the Supreme Court in May, 1897, the Commission had attempted by a single order to substitute, not "a rate" but several thousand rates, which it regarded as "reasonable and just," for several thousand other rates that it had condemned. The Commission regards it as "persistent misrepresentation" to allege that the power sought is that of rate-making, but if it is the misrepresentation began with the highest court in the land. In deciding the case referred to the Supreme Court said:

"There is nothing in the Act requiring the Commission to proceed singly against each railroad company for each supposed or alleged violation of the Act. In this very case the order of the Com-

mission was directed against a score or more of companies and determined the maximum rates on half a dozen classes of freight from Cincinnati and Chicago, respectively, to several named southern points and the territory contiguous thereto, so that if the power exists, as is claimed, there would be no escape from the conclusion that it would be within the discretion of the Commission of its own motion to suggest that the interstate rates on all the roads of the country were unjust and unreasonable, notify the several roads of such opinion, direct a hearing, and upon such a hearing make one general order, reaching to every road and covering every rate. (167 U. S. 508.)"

The Commission alway uses the word "rate," but in practice its orders have, almost without exception, related to a large number of rates. In its special report to the Senate, dated May 1, 1905, the Commission said:

"It should be noted that the number of cases by no means measures the extent and variety of the interests involved, since a single case may be brought by a municipal or commercial organization on behalf of all shippers in an important locality and against an entire group of carriers reaching numerous sections and distant points of origin or destination."

RAILWAY CONDUCTORS IN OPPOSITION.

The annual convention of the Order of Railway Conductors, held at Portland, Oregon, on May 13, 1905, adopted the following resolutions:

"Whereas, the Congress of the United States will have before it at the coming session the question of additional legislation affecting the American railways, employing 1,300,000 people: Therefore, be it, by the Order of Railway Conductors in biennial convention assembled,

"RESOLVED, that we hereby endorse the attitude of President Roosevelt in condemning secret

rebates and other illegalities, and commend the attitude of the heads of the American railways, who, with practical unanimity, have joined with the President on this question; and be it further

"RESOLVED, that we respectfully represent to Congress the inadvisability of legislation vesting in the hands of a commission power over railway rates, now lower by far in the United States than in any other country; that this low cost of transportation is the result of the efficiency of American railway management and operation, which has built up the country through constant improvement in service and development of territory, while at the same time recognition has been given to the value of intelligence among employees, in contrast to foreign methods, where high freight rates and lowest wages for employees obtain; that the freight rates of this country average only 2 per cent of the cost of articles to the consumer; thus making the freight rates an insignificant factor in selling price, numerous standard articles being sold at the same price in all parts of the country; and be it further

"Resolved, that the proposed legislation is not in harmony with our idea of the spirit of American jurisprudence, inasmuch as it contemplates that a single body shall have the right to investigate, indict, try, and condemn, and then enforce its decision at the cost of carriers, pending appeal, which is manifestly inequitable; and that if there is to be legislation on this subject it should be such as would secure and insure justice and equity, and preserve equal rights for all parties concerned, but, in view of the facts, legislation affecting rates is not called for at this time and would be inad-

visable: and be it further

"Resolved, that this convention finds itself in accord with President Roosevelt, who, in a message to Congress has said: 'It must not be forgotten that our railways are the arteries through which the commercial life-blood of this nation flows. Nothing could be more foolish than the enactment of legislation which would interfere with the development and operation of these commercial agencies."

LOCOMOTIVE ENGINEERS. "The Congressional Committee authorized to investigate railroad practices so as to give the Senate more information when the Esch-Townsend bill, passed by the House. comes up at the next session, probably in October, began their inquiry on April 17. We believe the Esch-Townsend bill will have to be very much modified before it can pass the Senate; but every subdivision of the B. of L. E. in the States should take an interest in this subject, which they ought to feel is very near to them for the interest of the railroads, in a large sense, is their interest: not that it' would result in the reduction of wages, but would, in all probability, deter any advance and would likely make it more difficult to sustain what we have, and it would be a good move either to see or write each Congressman and Senator. and express disapproval of any measure which would take from the railroad management the rate-making power. Let the law be amended, if necessary, to give the Commission power to cure such evils as are complained of, and give it unqualified authority to enforce the Interstate Commerce law. It is very difficult for a layman to see wherein the Government can infringe at will upon the liberty of contract of railroads in the interest of the shipper, when there can be no legal restriction placed on bakeshops in the interest of the journeyman baker or the public." Editorial in the Locomotive Engineers' Monthly Journal, May, 1905.

INTERNATIONAL RAILWAY CONGRESS. The International Railway Congress which convened in Washington, D. C., during May, 1905, was composed of representatives of practically all the important rail-

way systems of the world, including those owned and operated by Governments as well as those under private ownership and management. One of the most important of the conclusions of the Congress related to railroad rates. After prolonged discussion of this subject, the Congress, consisting of 574 delegates from thirty-seven countries, unanimously expressed its conclusions as follows:

"Tariffs should be based on commercial principles, taking into account the special conditions which bear upon the commercial value of the services rendered. With the reservation that rates shall be charged without arbitrary discrimination to all shippers alike, under like conditions, the making of rates should, as far as possible, have all the elasticity necessary to permit the development of the traffic and to produce the greatest results to the public and to the railroads themselves."

These conclusions were ratified at the close of the session after President Roosevelt's speeches had been the topic of discussion and two day's after Secretary Taft's address on freight rates at the banquet of the Congress. It was thoroughly understood that the ideal conditions pointed out in the resolution are not attainable under Government rate-making.

MANUFACTURERS PROTEST AGAINST RATE-FIXING. B. T. Babbitt Co., soap manufacturers, have very decided views regarding the proposed legislation at Washington in the matter of railroad rates, and have sent the following communication, under date July 12, to the chairman of the Interstate Commerce Committee, United States Senate, and the chairman of the House Committee on Interstate and Foreign Commerce, Washington, D. C. This company is now constructing what will be one of the largest soap works in the world at Granton, N. J., which place will in the near future be called Babbitt, on account of the great plant and the development which will take place in the locality. This soap company ships its product to all parts of the United States and is largely interested in railroad rate matters:

"We desire to enter our protest against any legislation which will give the Government the right to fix railroad rates. We are in favor of the most drastic legislation to prevent the railroads from giving secret rebates and making discriminations in favor of one shipper over another. All under similar circumstances and conditions should be treated alike and no one shipper should be favored above another. This is so essential to the business interests of this country that laws should be made on this subject and worded so clearly that there can be no possible misunderstanding. We should know, now and for all time, that no one is getting a better rate than we are under similar circumstances and conditions.

"The giving of secret rebates, or doing for one what is not done for all, should be effectively legislated against; but we draw the line at the right of the Government to make the rates that the railroads shall charge.

"It is true that the railroads are, to a certain extent, a semi-public institution, and the Government has therefore the right to a certain amount of control over their conduct, and where rates are excessive or unjust the matter should go before a court of equity and justice should decide the matter.

"The railroads have the right of eminent domain; they can take land to extend their railroad in the national interests, and where the price of land is exorbitant the courts try the matter and fix a fair rate; but this does not warrant the Government in telling the land owner at what price he must sell the remainder of his land to other individuals.

"The railroads manufacture a commodity called 'transportation,' which they sell at the market price. They are, after all, private enterprises of a semi-public nature—an aggregation of individuals who subscribe capital for the construction of a transportation venture, and they are entitled to a fair return on their investment, the same as every other business.

"The western and southern parts of this country are far from being developed in the matter of railroads, and manufacturers of all kinds look forward to the building of new railroads and the consequent settling up of territory now sparsely populated, so that new markets can be created for manufactured product. If the Government be permitted to fix rates the investing public will be reluctant to put its money into new railroads. It requires, as stated, an aggregation of capital to build a railroad. If the Government be permitted to fix the rates it would have to state beforehand what the rates on a newly-projected railroad would be, which in nine out of ten cases would be practically impossible. Government supervision or regulation is all right, but one can have too much interference, with the result that 'cold water' is thrown on private enterprise. As stated, we are in favor of thé most drastic laws to prevent secret rebates and unjust discriminations, but we are emphatic in protesting against the right of the Government to make the rates.

"We have been in business for more than sixty years, and feel that it is our duty, as citizens and manufacturers shipping to all parts of the country, to respectfully ask that our views be considered, as we are interested in the maintenance of correct principles, so that this Government may endure on solid lines; and private enterprise, which has made it great, be not discouraged. "Yours truly,
"B. T. BABBITT.

[&]quot;By Clarence M. Hyde, President."

REAL POWER IN INVERSE RATIO TO STATUTORY POWER. "The Massachusetts Railroad Commission is perhaps the best known example of this kind. In the days of its most successful operation it had practically no power except the power to report; but its reports showed such a clear understanding of the points at issue that they were accepted as authority by impartial men on both sides. * * * It is true, though it sounds paradoxical, that the power of these commissions is lessened by increasing their powers. They are engaged in building up new laws, new traditions, and new methods of business where it is absolutely essential that their reasoning should command the assent of clear-headed men on both sides. When they cease to rely on their reason and fall back on authority, they lose the educational power which is the source of their dominant influence."—President A. T. Hadley, Economics, p. 177.

CONGRESSMAN STEVENS .: "Under the operation of the Esch-Townsend bill, rates would be established very gradually over the country, one section being taken at a time, and months, not to say years, would elapse before the Interstate Commerce Commission could fix rates covering the country as a whole. The rates thus established would be rigid and inelastic, for it would require a legislative enactment to make them operative and another legislative enactment to amend them, which would take much time. * * * As an illustration, let it be supposed that the Esch-Townsend bill is the law of the land, and that the legislatures of the Middle West States. such as Minnesota, Wisconsin, Iowa, Kansas, and Nebraska, enact legislation that is now pending to increase the rate-making power of railroad commissions within those States. Let it be supposed, further, that the Interstate Commerce Commission, * * * was to hold protracted hearings and fix a system of rates for all tariffs to the Gulf ports. Much time would elapse before other sections of the country could have rates similarly established, and during the inter-

val much harm might be accomplished. * * * Suppose, on complaint, the rates from the Missouri river to New Orleans are fixed by the Interstate Commerce Commission under, say, the Esch-Townsend bill, and that the railroad commissions of Kansas and Nebraska have fixed rates, the latter from all State points to Omaha, and the former from all State points to Arkansas City, Kansas. Those rates fixed by process of law, could only be changed by subsequent investigation and order made in process of law, and the territory where they are operative is removed from the domain of competition. Meanwhile, suppose that the Interstate Commerce Commission has not had time, as it would not have had, to fix rates from the Missouri river to the Atlantic coast either by way of Chicago or Minneapolis and Duluth. What is the inevitable result? The rates to the Atlantic coast being controlled by competition, the transportation lines in that direction monopolize the grain trade, and the lines to the Gulf, having the inelastic rate fixed by law, and not competition, are unable to attract the grain business, and both they and the country which they traverse suffer. * * * The period of transition from the present competitive system to the system of fixed Federal rates would be a period of distress for some parts of the country and increased prosperity for others, no matter what form the legislation might take." -Hon. F. C. Stevens, representative in Congress from the St. Paul, Minnesota, district in a recent interview.

IMPORTANCE OF THE QUESTION. The fact that the Congress probably possesses the power of rate-making for interstate railways, a power conferred only by implication in the days when transportation was exclusively by wagon or by water, when commerce among the States was insignificant in volume and attended by conditions wholly different from those brought into being by the, then undreamed of, locomotive, when the greater portion of the present area of the United States was an uninhabited and track-

less wilderness, when the entire population of the country was less than four millions, when it contained but five cities of 10,000 inhabitants and none over 35,000; is not proof that it should be fully exercised in the day when even the oceans do not mark the boundaries of the nation, when the substantially ceaseless travel of 45,000 locomotives over 205,000 miles of track is mainly for the movement of interstate traffic, when continental America counts its population as 85,000,000 and one of its seaports contains more people than were covered by its flag when the power which, so barren then but so potent now, was established. As said by the Supreme Court in the Maximum Rate case:

"The importance of the question can not be overestimated. Billions of dollars are invested in railroad properties. Millions of passengers, as well as millions of tons of freight, are moved each year by the railroad companies, and this transportation is carried on by a multitude of corporations working in different parts of the country and subjected to varying and diverse conditions. (167 U. S. 494.)"

A less authoritative contribution to the discussion on this subject, says, with truth:

"The power to 'revise rates and regulations' is the power generally to make rates. Applied to American interstate railway services, it is greater power than has ever been exercised by any president or prince, by any Congress or Parliament, by any body of five men, or of five thousand men. It is power to bind or to loose industry, to enrich or to impoverish both capital and labor, to build up or to tear down communities and commerce."

DISTANCE TARIFFS WOULD RESULT. Nearly all the applications for changes in rates now received by the railways are supported either by the claim that similar freight is being hauled the same distance for a

lower charge or a greater distance for the same charge. As the railways, under the proposed law, which would make every proper concession a powerful weapon to compel other and improper reductions, could not afford to make changes, shippers would soon stop submitting their representations of this sort to the carriers and would file them, as complaints, with the Commission. And how would they be handled? The history of the State Commissions shows that they always make distance the controlling factor, and it is easy to perceive the reason and to foresee that the Federal Commission would do the same. Distance is the one salient, universal, and changeless feature which is always within the Comprehension of a rate-making Commission. The official vision, often separated by half a continent from the facts, can comprehend a mile when it can not comprehend a mountain. Such a body always struggles ineffectually, if at all, against the principle of the distance tariff. It may proclaim, as the Interstate Commerce Commission has proclaimed, the importance of other factors; it may protest, as the Commission has protested, that distance does not and ought not to control, but when the practical test comes it will, nine times cut of ten, as has the Commission in an even greater proportion of its decisions, accord paramount influence to the distance factor.

THERE WOULD BE FEW VOLUNTARY REDUC-TIONS IN RATES. The history of experiments like that now proposed shows conclusively that the purchasers of transportation invariably fare far better with open-minded railway officers than they ever do with rate-making Commissions. No less than 30,000 railway officers are to-day looking for opportunities to make profitable reductions in rates. They conduct this search not as philanthropists, or the agents of

philanthropists, but because the first lesson they have learned as traffic officers and the most thoroughly accepted principle on which they act is that, under certain conditions, lower rates mean more business and an increase in revenue which exceeds the increased cost that the new business entails. They know that progress in this direction is a geometrical progressionthat is, that the lower the rates the greater the traffic and, within limits, the greater the net revenue; the greater the traffic the greater the number and prosperity of their customers; that more prosperous customers mean new items of traffic and enlarged movement of the old items, and that these augmentations will warrant other reductions in charges which will cause a repetition of the process. Under normal conditions, and eliminating the items of traffic whose volume is not elastic, there will be no cessation in the downward trend of rates, until every consumer is satisfied. But create a rate-making Commission and everything is changed. The traffic officer who formerly sought for opportunities to reduce his rates is no longer openminded; he has been transformed into an advocate of the existing schedule and every item in it. He knows that a voluntary reduction in one direction will be used as a club to compel an involuntary one in another. He knows that until driven to plead at the bar of justice that the property of his corporation is being confiscated, without due process of law, its revenues will have no defender but himself and his fellowofficers. Therefore his answer to the shipper who seeks a reduced rate is very likely to be that it is the business of the Interstate Commerce Commission to make reductions. Thus substantially the whole burden of adjusting rates to new conditions would be thrown upon the Commission. The power of initiating changes in rates not complained against would be but nominal

and so limited as to make its exercise too dangerous to be permitted. So it has proved in other countries and so it would be in this. And no Commission of five men or of fifty men can order reductions, after investigations bearing the slightest resemblance to judicial procedure, with one-tenth of the rapidity with which they are now voluntarily made.

INCREASES IN RATES WOULD RESULT. If only the difference between one rate and another is in controversy, it can be just as effectively modified by raising one of them as by lowering the other. No one contends, for example, that a rate of 20 cents per 100 pounds on grain shipped from Chicago to New York is unreasonable, but it was recently contended by New York interests that a difference of 3 cents in favor of Baltimore was excessive. If the Commission, having obtained the power now sought, should sustain such a contention and order the carriers to cease and desist from enforcing a differential of more than 1 cent, its order could be obeyed by reducing the New York rate from 20 to 18 cents or by raising the Baltimore rate from 17 to 19. If the companies interested chose the latter method, what agency could compel them instead to lower the just and reasonable rate to New York? Indeed, in such a contest, where the higher rate is reasonable, it is obvious that the only remedy which would be sustained on appeal to the courts, would be an advance of the lower rate. The Commission has, in its reports, indicated many cases in which it would have exercised this power to prescribe minimum rates. In one case (Annual Report for 1897, pp. 24-25) the power would have been used to require an advance. or perhaps to prevent a reduction, in the rates on lumber from Winona, Minnesota, to Kansas City, Omaha, and contiguous territory. Again, in 1898, the Commission enumerated (Annual Report for 1898, pp.

23-24) three cases of great importance which it thought served as illustrations of its contention that the fact that it can not prescribe minimum rates constitutes "a serious defect in the statute."

A FLOOD OF LITIGATION WOULD FOLLOW.

The present Interstate Commerce law has probably received about all of the judicial interpretation which it requires. Neither the Commission nor the litigants before it need hereafter go far astray as to the authority which it confers or the remedies which it affords. Eighteen years have barely sufficed to bring about this fortunate situation. It would be a great pity if on the hour of this attainment it should, without sufficient reason, give place to a new law which would require a second period of judicial interpretation. Yet it is beyond the utmost power of statesman or lawyer to devise a statute on so complex and important a subject as this, a statute proposing to modify and control all of the contractual relations between interstate railways and their patrons, which will not require extended and elaborate interpretation through a term of years before it is fully and clearly established. It should not be forgotten that there are two clauses of the Federal Constitution under which every rate prescribed by legislative authority can be brought before the Federal Courts. These are:

(a) "No person shall be * * * deprived of life, liberty or property without due process of law," and
(b) "No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another."

ONE EFFECT OF RAILWAY DEPRESSION. The following table shows the reduction in the numbers of the various classes of railway employees made necessary by the depression of the railway business during the fiscal year 1894. For the sake of completeness the numbers of men employed in each class in 1903 are also shown:

CLASS	NUMBER OF EMPLOYEES ON JUNE 30				
	1893	1894	1903		
General officers. Other officers. General office clerks Station agents. Other station men Enginemen. Firemen. Conductors. Other trainmen Machinists. Carpenters. Other shopmen. Section foremen. Other trackmen. Switchmen, flagmen, etc. Operators and despatchers. Floating equipment, employees. All other employees & laborers. Unclassified.	6,610 27,584 28,019 75,181 38,781 40,359 27,537 72,959 30,869 41,878 93,709 29,699 180,154 46,048 22,619 16,146 105,166 284	5,257 1,778 24,779 28,199 71,150 35,466 36,327 24,823 63,417 29,245 36,328 [84,359 29,660 150,711 43,219 22,145 7,469 85,276	4,842 5,201 42,218 34,892 120,724 52,993 56,041 139,741 104,885 44,819 56,407 154,635 37,101 300,714 49,961 30,984 7,949 168,430		
Total	873,602	779,608	1,312,537		

MISCHIEF WILL FOLLOW. "It is doubtful if many of those who are calling for radical governmental control over transportation charges have stopped to inquire what has been the chief agency in making it possible to relate this wonderful tale of prosperity and progress, * * * there can be no doubt but that, on the whole the freight rates of the country have been adjusted in the past in very nearly the best way possible for the upbuilding of the country's commerce. * * * For many a year to come there is little doubt that the interest of the whole country can best be served if the practice of the railways is not interfered with of introducing experimental rates which are abolished when found ill-advised or unprofitable."—Professor W. D. Taylor, of the University of Wisconsin, Review of Reviews, August, 1905.

A LESSON FROM EXPERIENCE. Pleading in its usual vein for additional authority, the Interstate Commerce Commission, in its eighteenth annual (1904) report said:

"In the fixing of rates upon all commodities for carriage in all directions and between all points reached by railroads it is inevitable that much injustice, unfairness, unreasonableness, preference and discrimination will be practiced, notwithstanding the greatest care and ripest judgment may be exercised by the railway officials charged with the duty of rate-making. These errors of judgment on the part of railway officials, many of them occurring in the hasty exercise of the ratemaking function or in the effort to press on to the discharge of other urgent duties, constitute the reason for Federal regulation and the basis of the present widespread demand for an amendment to the existing statute which will enable their speedy correction when the results of these errors are felt by the commercial public."

It is worth while to contrast with the foregoing glowing summary of the Commission's hopes a part of the published statement of one of the litigants recently before it. The Boston Chamber of Commerce has just published, in pamphlet form, a criticism of the action of the Commission, in regard to port differentials, from which the following extracts have been taken:

"The report and opinion of the Commission defies analysis. It openly confesses a vain search for some fundamental principle upon which to settle the dispute. Failing in this it flounders around in an abortive attempt to justify the indefensible. It undertakes to 'rob Peter to pay Paul' and to accomplish the impossible feat of pleasing everybody without offending anyone. It enunciates as facts statements contradicted by the evidence submitted. It strives to create an artificial division of the export traffic between the different ports by strangling competition through a so-called 'equalization of advantages.'

* * * Was ever 'Confusion worse confounded?'
* * * In this remarkable decision, the Commission, after stating that the purpose of the original differential agreement of 1877 was to create equal through rates, finally decides that, subject to slight modification, the differentials provided for in that agreement should now substantially be retained for the astonishing purpose of creating unequal through rates. Lastly, the Commission has, to the extent of its ability, compelled the New York and Boston railroad lines to charge higher rates than they are ready and willing to accept."

RECENT EVIDENCE ON GOVERNMENT ENTER-PRISE. "If Government ownership of railways, its next-door neighbor, Government rate-making, or any other of the various proposals for an extension of Federal enterprise in the industrial world comes before Congress in an urgent form next winter, it ought to encounter several fresh obstacles. The current year has been particularly prolific in incidents which place Government enterprise of whatever sort in a most unenviable light, so far at least as relates to our own country. It will be no more than just that those who advocate any addition to State functions should explain the difficulties in performing those or similar functions under our administrative system. Advocates of the schemes proposed must show a clean record in these matters before they can expect to have their proposals for new extensions taken seriously.

Unfortunate as the situation may seem, wounding to our national pride as the fact itself may be, it is true that recent developments leave hardly a single element of Government industrial enterprise without its taint. In the crop report service it has been seen how great is the danger that men entrusted with no elaborate process of manufacture, with no extensive system of buying supplies, but simply concerned with the task

of collecting and honestly safeguarding valuable information, could be wrought upon by the desire for gain in such a way as absolutely to prostitute their work to private profit and to inflict serious damage upon a section of the community in order to serve their own ends. The same moral is pointed by the conditions in various other bureaus where it now appears that even men scientifically educated, selected under stringent tests of fitness and entrusted primarily with investigative work have been unable to resist the temptation to make money through the sale of the discoveries or information obtained in the Government service and at Government expense. No matter whether they have actually used the information placed in their hands in a gainful way, or have merely employed it as a means of favoring certain private individuals to the detriment of others, the point is the same-Government servants of the highest order have been unable to stand the test of responsibility for information that had a commercial value. In other bureaus and departments where Government officers were entrusted with the actual making of contracts for supplies, or with large expenditures of money, the situation has been even more disastrous. shown not merely by the current inquiries in Washington, which throw some light upon that phase of the situation, but is abundantly proved by investigations not too far in the past, which have demonstrated beyond a peradventure the unfitness, not of one, but of considerable numbers of officials, to sustain the public trust with which they were charged.

But it is not merely these familiar instances of unsatisfactory official conduct from which inferences may be drawn concerning the fitness of our Government as an industrial agency. More important than any of of them, it should be noted, is the fact that they were

committed without the knowledge of the man at the head. Secretary Wilson had no idea of the conditions that prevailed in various bureaus in his own department. The late Secretary Payne asserted and reasserted his utter ignorance of the terrible conditions in the Post Office. No one supposes for a minute that Secretary Hitchcock had the remotest conception of the land frauds that were being perpetrated in the Department of the Interior. They were undoubtedly in progress for many years before they were even suspected by him. Disastrous experience, too, has shown the inefficiency of Government officials as inspectors of financial and other institutions. As bank examiners, life insurance superintendents, steamboat inspectors, and in other like responsible positions, their inattention or inefficiency has been emphasized in the most lamentable way by recent examples. The evil is as bad among Federal employees as among State officers. It would be very difficult to name an instance in which the Government has touched industrial enterprise with success.

And, to accomplish even the results that have been actually obtained, how large a force, how extravagant an outlay has been required. The mounting figures of the Treasury deficit, the inability to curtail appropriations, the appointment of a Commission for the special purpose of ascertaining how to do away with some of the manifestly cumbersome and useless machinery designed to avoid dishonesty and fraud, bear eloquent testimony to the difficulty of administering any public enterprise with the methods employed by our Government. Nor is there much prospect of improvement. The Government is apparently the only organization that cannot learn by experience. Things are no better now in the Federal service than they have been in the past. Experience has not

taught a single lesson. Practice instead of reducing the number of routine operations required in performing a given function, has increased them. The demand for higher salaries for Government employees, notwithstanding that the pay received by these employees is higher than they could get in other occupations, and the shameless argument that they may be inefficient because poorly paid, and must be excused for dishonesty for the same reason, is sufficient indication of the probable future of the Government service.

It is no reply to argument based on these conditions to say that recent revelations in private companies have indicated as bad a state of affairs, if not worse. The truth is that it is precisely those enterprises that approximate most nearly to governmental method in their administration that stand convicted of irregular practices. Freedom from competition, routine methods in business, favoritism whether of the family or political type, absence of democratic control by those who are concerned, will produce the same results whether under Government or private auspices. argument against an extension of Government enterprise is that such evils assume a more virulent form in that field of endeavor, and that the usual checks are there absent. Of this the recent revelations afford as striking an instance as we have had for a long time past."-Editorial, New York Journal of Commerce, August 3, 1905.

RAILWAYS IN FOREIGN COUNTRIES

MEMORANDUM FOR THE COMMITTEE ON INTERSTATE COMMERCE OF THE UNITED STATES SENATE.

On pages 3600-3601 of Volume IV of the hearings before the Committee on Interstate Commerce, pursuant to Senate Resolution No. 288, it appears that while I was before the Committee Senator Foraker addressed me as follows:

"If you have opportunity, before you put these other matters in evidence that you intend to look up and supply, I wish you would look, and give us the result of your investigations in a general way, not going into detail, as to the effect on the decline in rates of governmental interference with the fixing of rates in any other countries."

In accordance with the foregoing, I have made a study of railway conditions in the United Kingdom, Prussia, France, Italy, Austria and Russia, from such sources as were available to me, and the results are herewith submitted.

UNITED KINGDOM.—European railroad policy, outside of the United Kingdom, is dominated by the spirit of nationality, whether the roads are privately owned, as in France, or under State ownership, as in Germany. In the United Kingdom, however, as in the United States, railway development was left to private initiative and governmental control has attempted the prevention and correction of abuses, not the strengthening of political power. In consequence, the experience of

England in railroad regulation is of far greater importance in the study of American problems than the experience of continental countries.

In the earliest English charters maximum rates of charge were fixed just as maximum tolls were in force for canal traffic. The importance of the maximum rates fixed in the charters, for ordinary transportation, was very slight for two reasons: (1) The actual charges in general were soon forced by business considerations far lower than was anticipated. Experience soon proved that much larger profit was to be obtained by hauling large quantities of goods at low rates than small quantities at high rates. (2) Even in the case of articles on which relatively high rates were charged, it was extremely difficult to ascertain precisely what the legal rates amounted to. used by the roads included terminal expenses and charges for collection and delivery. The conclusion of Professor (now President) Hadley, in his Railroad Transportation (p. 178), that "fixed maxima are of next to no importance in preventing extortion" is amply proved by English experience.

From the courts the question was finally carried to Parliament, which in 1888 determined that the maximum freight rates should be thoroughly revised. The work of revision was entrusted to the Board of Trade, which after conducting an exhaustive inquiry during 1889 and 1890 submitted its results to Parliament.

The new schedules, which were to go into effect on January 1, 1893, were not finally published in some cases until a few months before the date set. The short time given was entirely inadequate for a thorough revision of the actual rate sheets. Many railroad managers also felt justified in increasing some of the rates that were lower than the new maxima in order to

compensate for the reductions which, in other instances, were required by them. * * * Although the railroads had the legal right to make any charges they desired so long as they did not exceed the legal maxima, their action caused great popular complaint and Parliament speedily passed the more stringent Railway and Canal Traffic Act of 1894. This statute provides that any shipper may appeal to the Railway Commission to annul any increased rate made on or after January 1, 1893, and that this shall be done unless the company justifies the increase to the satisfaction of the Commission. Thus not only are fixed maximum rates imposed by Parliament, but the railroads have no longer the power to raise any rate whatever except with judicial approval.

Has the stringent legislation in force since 1893 led to reduced rates? Mr. W. M. Acworth, probably the leading English writer and lecturer on railroad questions, from whose recent book the foregoing account has been largely taken, reaches the following con-

clusion: *

The legislation of the years from 1891 to 1894 has done much to prevent any natural and gradual lowering of rates. A railway company is still free to lower. It has ceased to be free to raise. A manager may desire to lower a rate, hoping thereby not only to benefit trade, but also, by increasing largely the volume of traffic, to increase his own net earnings. But it is only a hope. In the nature of the case certainty is not attainable in advance. A prudent manager, therefore, will not, unless his hope is closely allied to certainty, lower a rate when he must face a lawsuit before he can put it up again. Still less will a conference of managers—and most important rates affect many companies—allow one of their number, more sanguine, or, it may be, more far-sighted than the rest, to go ahead and make experiments. This, at least, is what we might expect a priori.

^{*} The Elements of Railway Economics, p. 158.

The truth of the a priori conclusion of Acworth, that the difficulty of raising rates has prevented the national decline in rates, is clearly shown by official statistics. In the ten years preceding governmental regulation the average freight rates per ton decreased 14½ per cent; in the decade following the decrease was less than 2½ per cent. The statistics in the Official Railway Returns, from which this striking comparison is taken, are as follows:

Average	Freight long tons	Freight charges (pounds sterling)	Rate per long ton (shil- lings)	Rate per short ton (cents)	Decline per cent
1879–1882 1888–1892 1898–1902	237,174,806 320,465,070 413,936,580	35,981,977 41,631,942 52,488,131	3.03 2.60 2.54	65.8 56.5 55.2	14.5 2.3

Unfortunately, the British railroad statistics do not show the distance over which the freight is carried, so that it is impossible to compare the rates per ton per mile during the different periods. This omission in the British statistics makes international comparisons of the amount of rates unsatisfactory; it is extremely unlikely, however, that there has been sufficient change in the length of the average haul or in the character of traffic to prevent the comparison just made from expressing in a general way the variation in rates within the country.

The more rapid and less interrupted decline in average freight rates in the United States, as compared with the arrested decline in the United Kingdom after the institution of governmental control, is shown

below:

DECLINE (per cent)

AVERAGE	UNITED KINGDOM	UNITED STATES
1879-1882 to 1888-1892	14.5	21.3
1888-1892 to 1898-1902	2.3	19.2

The demoralizing effect on trade of the radical legislative changes of 1888-1894 has been pointed out. Yet there were certain features peculiar to the British railroad situation that made the change much less injurious and the effect of extreme regulation less productive of evil than would have been the case had such restrictions been imposed in the United States. The work of the Railway Clearing House, instituted in 1850, together with the combination of the roads into a few companies, had so unified railroad practice, classification and interests, that while the task was enormous it was not impossible for the Board of Trade to construct a workable series of maximum charges. Yet some of the charges were anomalous. One such case is cited by Acworth (p. 146). Two small roads were granted a special maximum of three pence per ton per mile on minerals, although the maximum on coffee and confectionery was only 2.65 pence. It appeared from statements submitted both by the managers and shippers that these roads were already in the hands of a receiver, the income not being sufficient to pay interest on their bonds, and that a lower rate on granite, which comprised the bulk of the traffic, would prevent their continued operation.

It has been shown that the decline in freight rates was arrested after the change in law. In a newer country, the decreased effort to build up new lines of traffic by tentative low rates could scarcely have failed to bring about disastrous results. With the fear of making open reductions in rates there would also have been a strong temptation to cut rates secretly if there had been active competition between the roads.

* * * * * * *

ON THE CONTINENT .- Professor Hadley t was undoubtedly correct when he attributed the growth of business activity on the part of Governments to three motives:

"1. To increase their own political influence.
"2. To make up for lack of private enterprise.
"3. To avoid abuses incident to private management."

"The last consideration, which is the main point ordinate part elsewhere. The desire to extend political influence—military, civil or financial—has usually been the chief motive."

Without fully appreciating this fact it is impossible to read correctly the railroad history of Europe. In England, where private enterprise was not lacking and where nationality was secured before the era of railroads, State ownership has never received serious consideration. France likewise was a nation before railroads were introduced, but the inability to interest private capital necessitated governmental subsidies coupled with rigorous control. German and Italian statesmen, on the other hand, welcomed the State railroad as an iron bond to safeguard national unity. In general, while economic considerations have been brought forward, the political danger of strong private companies and the military advantage of governmental control have been the chief incentives to State ownership.

The mileage of State and private railroads in the various European countries in 1902 is shown in the following table compiled from official statistics of the various countries, supplemented by the British Statistical Abstract.

[†] Railroad Transportation, p. 238.

	1	1	1
	TOTAL	PRIVATE OPERATION	STATE OPERATION
Germany Russia, European (exclusive of Finland). France. United Kingdom. Austria. Hungary. Italy (1901). Spain (1900). Sweden. Belgium Belgium Belgium Denmark. Notherlands. Portugal (1901). Norway. Bulgaria (1901). Greece.	32,288 30,224 27,874 22,152 12,409 10,820 9,888 8,206 7,421 2,845 2,468 1,969 1,771 1,348 1,307 921 694 369	2,815 11,665 26,148 22,152 5,004 1,848 49,888 8,206 5,005 330 b2,468 767 800 823 140 192 694	29,473 18,559 1,726 7,405 8,972 2,416 2,515 1,969 1,112 971 525 1,167 729 355
Total (of countries named).	176,853	98,959	77,894
2		55,000	,002

a Owned by State, but leased to private companies.
b In 1898 it was decided to purchase the entire system partly in 1903 and partly in 1909.

France.—France was much behind other powers in obtaining railroads. Unwilling to have railroads built without a comprehensive plan, the construction of lines was not permitted until the details of a complete system for the country were worked out. The unwillingness of capital to undertake the building of lines which were laid out with regard to other than purely business purposes and moreover were to be subject to rigorous governmental supervision, led to an unique compromise between public and private ownership. Somewhat more than half the total cost was contributed by the Government, which retained ownership of the roadbed, while the remainder necessary for track equipment, etc., was required from the companies undertaking the construction and operation of the

lines. After a fixed period—at first forty years, but later, in the fifties, extended for ninety-nine years from the date of the extension—the whole system is to revert to the National Government. The systematic location of the lines prevented parallel lines, limited competition, and facilitated combination. The "great companies," six in number, each supreme within its own territory, now control all the important railroad transportation of the country. About 1877 the Government acquired one small system in the southwest. For some years afterward there was a strong movement in favor of Government ownership by purchase and new construction, but the movement soon collapsed. There has been a lack of incentive to the building of new lines, which was overcome partially by additional State aid in the form of a guarantee of bonds in 1859 and a guarantee of dividends in 1883. Even now France contains only 134 miles of line per 1,000 square miles of territory against an average of 155 miles in Germany.

The control over rates on private lines in France is probably quite as rigorous as over State lines in Germany. Indeed it is doubtful whether there is as great elasticity in France as in Germany.* Every change in rates must receive the approval of the ministry before it goes into effect. This approval, known as "homologation," is a very complicated matter. As described

^{*} Professor Hadley, in his Railroad Transportation, pp. 200-201, says: "It is an interesting fact that a railroad which is owned and managed by a State, in its general policy is much more like our own railroads than is a road which is owned by a private company, but strictly controlled by State regulations. In the latter case, the State has no direct interest in making exceptions to its own rules. In the former case it has. * * * This difference is strikingly seen in comparing the development of railroads in Belgium or Germany, where the State actually owned the leading roads, with that in France, where it merely controlled them. The former was much more untrammeled."

in Guyot and Raffalovitch's Dictionaire du commerce, de l'industrie et de la banque, † the following steps must be taken before the approval is given. The change must be submitted to the Ministry of Public Works and posted for one month. It is referred to the prefects of the various departments or provinces traversed by the railroad, and is then submitted with reports of the prefects to the inspector-general of control. change suggested is also referred to chambers of commerce and other commercial bodies that may be interested; it is inserted in the official journal; it is examined by various railroad inspectors, and by engineers in charge of navigable streams, ports and mines in the region concerned; and finally comes for decision before the Consultative Railroad Commission. Even then as a rule only provisional approval is given, in order to permit the ministry later, if it so desired, to cancel the change. The grant of provisional approval was at first held to be illegal by the railroads; but in practice few if any changes in rates have been made by the Government, through this power, without the initiative of the companies. The delay in procuring the authority to change rates is so great that in the case of export and transit rates some simplification of procedure is permitted. Outside of France, with its consolidated railway systems, lack of competition, comparatively slow industrial change, and extensive system of waterways; so inelastic a system of rates would be intolerable.

The changes in rates described can take place only within fixed maximum limits, which since 1859 have been uniform for all railroads. These maximum rates show separately tolls and charges for transportation. Care was taken to reserve for social purposes further control in certain cases. For example, the maximum

[†] See also Kaufmann: La politique française en matiere de chemins de fer (translated from the German).

rate on grain (including tolls and transportation charges) was fixed at 14 centimes per metric ton per kilometer; but if the price of wheat exceeds 20 francs per hectoliter, the Government may temporarily reduce the freight rate one-half (to 7 centimes per ton kilometer).

The three leading features of French railroad history are: (1) Enormous State grants, aggregating at the close of 1901,978,000,000 francs, of which only 23,000,000 francs have been returned, leaving nearly 955,000,000 francs or \$184,000,000 still outstanding. (2) Complete private monopoly of railroad transportation. (3) Rigorous governmental control of rates, which nevertheless has not prevented much higher rates than are in force in Germany, Austria or Hungary and 80 per cent above those in the United States.

AUSTRIA-HUNGARY .- At first Austria attempted to follow the French system of a radiating system of lines from the capital, to be constructed by private enterprise with State aid and subject to complete governmental control of rates. The system proved unsuited to Austrian conditions. Vienna is not the economic center of Austria as Paris is that of France. Moreover the heavy export trade required cheap long-distance rates that proved unprofitable. Railway lines were taken over by the Government and new State lines were built until in 1854 two-thirds the mileage of the country was under governmental ownership. Then followed a period during which State lines were sold, at a great sacrifice, to private companies. In 1874 but eight miles were retained by the Government. The crisis of 1873, causing decreased earnings and consequent heavy payments of guaranteed receipts and dividends by the State, once more changed the national railway policy. The example of Prussia also contributed, doubtless, to the policy of State acquisition. In 1902, out of a total of 12,409 miles, the State owned 4,874 miles and operated in all 7,405 miles—60 per cent of the total. Industrial and political conditions have prevented the exaction of rates sufficiently high to permit the payment of interest charges without a considerable contribution of State funds. The railway system constitutes a burden of about 65,000,000 crowns (over \$13,000,000) annually on the tax payers, according to the British Diplomatic and Consular Reports (annual series No. 3343, p. 39).

During the first period of railway construction, the independence of Hungary in internal affairs had not been secured and Hungarian roads were subject to Austrian control. After 1867 the desire of the new Hungarian Government to promote stronger nationality made it favorable to State ownership of railroads; as in Austria, the crisis of 1873 operated in the same direction. The movement has gone further in Hungary than in Austria. In 1902, 4,772 miles were owned by the State, 4,200 miles of private roads were operated by the State, and only 1,848 miles, 17 per cent of the total, were under private management.

The so-called "zone tariff" was introduced in Hungary in 1889, and had for its effect the cheapening of long-distance travel and traffic as compared with short distance. This scheme is peculiarly applicable to a country like Hungary which exports large quantities of raw products and where long distances must be traversed by bulky goods. But the criticism that imported goods are likewise unduly favored was not wanting. ‡ The zone tariff, slightly modified, was later adopted by Austria.

\$ See Ulrich: Tarifs de chemins de fer, pp. 150-151.

In Hungary, as in Austria, insufficient receipts have necessitated drawing upon the public treasury to meet a deficit. The British report already quoted says (p. 99):

"The consequences of cheap tariffs is, therefore, that the State is forced to cover from other sources of income the deficits in the interest payable on the railway loans. As, however, these low tariffs are in many instances an essential condition of profitable production, it is impossible for the repeated movements toward raising the tariffs to be successful. Every such attempt is defeated by the vigorous and prompt opposition of the representatives of commerce, industry and trade, backed up by the agricultural interest."

ITALY.—The early railroads of Italy were disconnected lines owned by the local States. The roads had been built, managed and operated under all forms of State participation. The construction of the connecting links, necessary for thorough traffic, was prevented by local jealousy.

With the nationalization of Italy these connecting lines were built. Consolidation was thus greatly facilitated. Four principal systems were formed by the consolidation of competing lines within a given area, not of connecting lines. Through traffic was not developed, the lines became an excessive burden on the State through its guarantee of earnings, and in 1870–1876 they were taken over by the Government. The lines were temporarily leased to private companies until the State should be in a position to operate them.

In the meantime the Commission of 1878 was instituted to investigate the best means of procedure. The Commission made a most exhaustive inquiry*. Its work extended over two or three years: an enormous amount of information was collected in regard to con-

^{*} Professor Hadley, on p. 219, declared that it was "the most thorough railroad investigation ever made in the world."

ditions both in Italy and abroad: its report, in seven volumes, covers every phase of governmental regulation, ownership and operation of railroads. The remarkably varied relations between the State and the railroads that have prevailed in Italy give especial weight to its conclusions, which are summarized by Professor Hadley (p. 253) as follows:

"The State is more apt to tax industry than to foster it; and when it attempts to tax industry, it is even less responsible than a private company. Second, State management is more costly than private management, and a great deal of capital is thus wasted. Third, political considerations are brought into a system of State management in a way which is disastrous to legitimate business, and demoralizing to politics."

This report, emphasized by the actual experiences that followed State acquisition and an unsuccessful attempt to manage one system, led to the leasing of the lines to three companies, two of which controlled separate trunk lines traversing Italy from northwest to southeast. These companies were to furnish the rolling stock; certain proportions of the gross receipts were to constitute reserves for extraordinary repairs and renewals of rails and rolling stock, and a variable percentage of the remainder, decreasing somewhat with increased earnings, was to be retained for expenses and profits. While the contracts made are doubtless open to criticism, the arrangement was on the whole probably as satisfactory as could have been made. since outright sale to private companies was out of the question. The average freight rates, while still high. show a marked decline after the new plan went into effect. The average charge in 1872 was 1.95 cents per ton-mile, in 1880 1.97 cents, and in 1890 1.64 cents. The subsequent reduction to 1.58 cents in 1899 was about as great as could be expected, since the private incentive to expand traffic by lowering charges is limited.

The leasing contracts were made for sixty years, but provided that either party might terminate them at the end of twenty or forty years. The financial results have been unsatisfactory. Instead of yielding a revenue the railroads have for several years been an expense to the State. In 1901 the deficit was nearly \$2,000,000, although the net receipts of the companies amounted to \$13,000,000. The Government, unable to have the contracts amended as it desired, has denounced them, to take effect this year.

GERMANY.—Germany represents the policy of State ownership more conspicuously than any other country of the first rank.

* * * * *

By extensive State ownership and by stringent control over private lines the Government now dominates the entire railroad system in Germany: That State ownership has been more successful in Germany than elsewhere is generally admitted. Although high compared with those in the United States, the average rates in force there are lower than elsewhere in Europe, with the exception of Russia, where the vast distances traversed render low mileage rates imperative. But, unlike the Russian roads, those of Germany are profitable, although the percentage of net receipts to cost of construction is gradually declining.

The general tariff in force is simple in principle.* The rate is made up of two factors, a despatch fee increasing slightly with the distance up to 100 kilometers (about 62 miles) and a mileage charge, decreasing in rate with increased distance. The ordinary tariffs comprise, in addition to the less-than-carload rate and the express rate (double the former) Class A1 (shipments of not less than 5 metric tons) and Class B

^{*} Pauer: Lehrbuch des Eisenbahn-Tarifwesens, p. 320.

(not less than 10 metric tons). There are besides four special classes applicable to articles specified in the tariff. One of these classes included shipments of between 5 and 10 metric tons (Class A2) and the other three classes (Classes I, II, III), shipments of not less than 10 metric tons. Class I is supposed to include in general higher-priced articles, such as manufactures, Class II semi-manufactured articles, and Class III low-priced goods, such as raw products. Grain, however, apparently to protect German farmers, is included in Class I.

But the special rates are further reduced by granting so called "preferential rates," which are described as "applicable to agricultural and industrial products, and intended to assist and facilitate imports and exports, and increase the traffic of the country." According to a recent British official report on "Prussian Railways" † no less than 63 per cent of the total ton-mileage is despatched under the preferential rates, while the special rates cover 17 per cent, and the ordinary rates only 20 per cent.

Some flexibility thus exists under the German system. But examples quoted in the British report referred to show clearly that these reductions are more frequently made for political than for economic reasons. The instances cited fall under six heads.§

- 1. As bounties to certain districts.
- 2. As export bounties.
- 3. For competition with foreign transport.
- 4. To support special important industries, such as the ship-building industry, the Silesian textile industries, and the beet-sugar industry, by conveying their raw materials at cheap rates.

[†]Diplomatic and Consular Reports, Miscellaneous series No.574. § Abstracted from the British Report on Prussian Railways, pp. 15-16.

- 5. As a special fuel tariff.
- 6. For the alleviation of distress due to bad harvests, floods, etc.

CONCLUSIONS.—In tracing briefly Government control and ownership in the leading countries of Europe, certain conclusions seem unavoidable.

- (1) Stringent control, as in the United Kingdom, and France, tends to prevent the reduction of rates. Without the ability to raise rates to their former level, experiments in lowering rates in order to build up traffic are not likely to be freely made.
- (2) A comparison of freight rates on the railroads of Europe, operated or controlled by the State, with those in force in the United States, proves that the latter have not only reached a much lower level of rates but show a much more rapid decline. In Russia, only, the rates, while higher, are somewhat comparable with those in the United States. In 1890 the average Russian rate per ton-mile was 1.14 cents and in 1900 0.84 cents. But the low rates in Russia, necessitated

^{*} Vol. IX, pp. 980-983.

by the long distances covered, frequently by goods for exportation, were accompanied by rapidly diminished net earnings per mile, and an absence of profits.†

While the average passenger rates are lower abroad than in this country, the service is usually so inferior as to make the comparisons valueless. But freight traffic is vastly more important than passenger travel. The following table shows average freight rates:

AVERAGE FREIGHT CHARGES PER TON PER MILE (cents)

0, 0	United	France	Germany	Austria	Hungary	Italy	Russia (European)
1870. 1880. 1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901.	1.89 1.23 .94 .90 .90 .88 .86 .84 .81 .75 .72 .73 .75	1.78 1.68 1.54 1.51 1.51 1.48 1.47 1.45 1.44 1.42 1.39 1.35 1.32 1.33	1.34 1.33 1.33 1.32 1.32 1.32 1.32 1.27 1.27 1.24 1.22 1.23 1.22	1.81 1.39 1.36 1.33 1.32 1.31 1.30 1.32 1.23 1.22 1.24 1.24 1.26	1.38 1.28 1.25 1.25 1.25 1.24 1.27 1.26 1.27 1.25 1.27	a1.95 1.97 1.64 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.63	1.14 1.06 .95 .99 1.00 .98 .95 .89 .86 .87

a For 1872. b Data not comparable with earlier years.

⁽³⁾ But the higher charges on the European railways have not resulted in profits. Where, as in Russia, Austria and Hungary, the rates are lower than in most other continental countries, a deficit has occurred. Germany might be held up as an instance where State ownership and Government rate-making have not yet caused a drain on the State treasury. But attention

[†] Commercial Russia in Monthly Summary of Commerce and Finance, Feb., 1904, p. 2762.

has already been directed to the fact that since popular demands have caused reductions in the rate schedules, the net earnings constitute a decreasing percentage of the cost of construction. Where private management prevails, decreases in rates go hand in hand with greater financial success on the part of the railroads; but under State control, political rather than economic necessity frequently reduces rates, thus benefiting individual interests at the expense of the general body of tax payers. Even where the higher rates obtain, however, as in France and Italy, the financial results to the State are very unsatisfactory. The profits of the private managers of companies are thoroughly safeguarded, while the State receives a very meager return for its large advances.

- (4) Private ownership and operation, without excessive legislative restrictions, appear to be necessary in order to obtain the utmost economy in railway management. The conclusion is supported by the results of the exhaustive investigation made by the Italian Railway Commission, and is admitted by the great majority of students of railway policy. Only responsibility to stockholders is a sufficient incentive to insure that changes in rates, improvements in service, equipment and tracks, and extension of line shall be made whenever they may reasonably be expected to cause an appropriate increase in profitable traffic and not under other conditions.
- (5) The greatest danger perhaps from State participation in rate-making is the substitution of political for economic considerations in the determination of charges. Low freight charges on international traffic under all forms of management are frequently guaranteed by competition between rival routes. But when the national desire to foster export trade is added, the incentive to increase shipments abroad becomes too

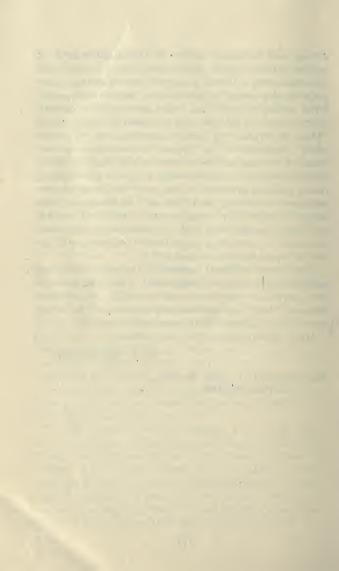
strong, and frequently results in the establishment of unremunerative rates that constitute a burden on internal traffic. Under general State ownership competition as a means of determining rates is abrogated. Even indirect competition, which prevents a monopoly on the part of private carriers from charging more "than the traffic will bear," loses much of its power when responsibility to private stockholders is exchanged for responsibility only to the public. With the withdrawal of competition as a force in determining rates, political pressure on the part of certain classes becomes too strong an influence. In Germany this danger is especially conspicuous. There two strong interests, the agrarians and the industrial class, have succeeded in obtaining a protective railway tariff as well as a protective customs tariff.

High rates, without generally favorable financial results; more costly management; the delegation of rate control to persons more amenable to political influence than business necessity—these are the most conspicuous results of European railway policy.

All of which is respectfully submitted.

H. T. NEWCOMB.

Washington, D. C., July 8, 1905, Bond Building.



INDEX

PAGE
A Rigid System
A Successful Statute124-125
Accident and Guaranty Companies as Railway Owners86, 87
Act to Regulate Commerce, Knapp, M. A., on124, 125
Acworth, W. M
Acworth, W. M., on Rate-making
Acworth, W. M., on Regulation in England23, 24
Advance in Rates97-100
Advance in Rates, Hay103-106
Advances in Classification99
Agricultural Implements, Rates49
Agricultural Products and the Ton-mile Unit38
American and Foreign Railroads, Leroy-Beaulieu, on10
Anniston Rates31
Any Rate and All Rates
Apples, Prices, 1899, 190361
Apples, Rates and Prices, 1897, 19059
Atlanta and Rome Rates95
Atlanta Journal on Georgia Rate-making21-22
Atlanta Rates31, 46-50
Australia's Lesson
Austria, Ton-mile Rates, 1870-1902
Austria-Hungary, Railways in
t -
Babbitt, B. T. Co., on Rate-making137-139
Bacon, E. P., on Elkins Law
Bacon, E. P., on Expert Knowledge
Bacon, E. P., on Mileage Basis28
Bacon, Rates and Prices, 1897, 19059
Banks and Railway Securities81-83
Barley and Its Equivalent in Railway Service64
Beans, Prices, 1899, 190361
Beans, Rates and Prices, 1897, 19059
Beef, Prices, 1899, 190361
Behlmer Case
Betterment and Capitalization72
Betterment and Earnings70
Betterments
Black Death30
Blacksmiths' Wages, 1899, 190367

INDEX

Boiler Makers' Wages, 1899, 1903	67
Bonds	
Bonds and Earnings	70
Bonds Held by Accident and Guaranty Companies	87
Bonds Held by Educational Institutions	88
Bonds Held by Fire Insurance Companies	86
Bonds Held by Life Insurance Companies	85
Bonds Owned by Banks	82
Bounty and Rate Regulation in Germany	28
Bread, Prices, 1899, 1903	61
Breadstuffs, Cost of, 1899-1903	63
Bricklayers' Wages, 1899, 1903	67
Buckwheat and Its Equivalent in Railway Service	64
Building Materials, Prices, 1890-1903	60
Butter Dishes, Wooden	14
Butter, Prices, 1899, 1903	61
Butter, Rates and Prices, 1897, 1905	9
Canadian Rate Regulation	.22-23
Canned Goods' Rates	.47, 48
Capital, Timidity of, and Rate Fixing	139
Capital, Timidity of, France	160
Capitalization	.71, 72
Capitalization, 1880, 1903	.72, 73
Capitalization, America	76
Capitalization and Mileage	.72, 73
Capitalization, England	76
Capitalization, France	76
Capitalization, Germany	76
Capitalization, Necessity for Increased	76
Carpenters, Number and Wages, 1903	66
Carpenters' Wages, 1899, 1903	67
Cartage Case	111
Cattle and the Equivalent in Railway Service	64
Cattle Raisers' Case	114
Chattanooga Case10	08, 116
Chattanooga Rates	31
Cheese, Prices, 1899, 1903	61
Cheese, Rates and Prices, 1897, 1905	
Chicago Basis and Western Rates	10
Chicago New-York Rate Basis	44
Chicago Rates	48
Chickens, Prices, 1899, 1903	61
Cincinnati Rates	48

C' ' D' ' 'I ' ' I I I I I I I I I	PAGE
Circumstances, Dissimilarity of, and Long and Short	
Clause	
Class Rates, Southern	
Classification, 1887, 1902	
Classification, Geographical	
Classification Rates	
Classification Rates, 1900	
Classification, Reductions in	
Clements, Commissioner, on Unsustained Cases	
Clothing, Cost of, 1899–1903	
Clothing, Prices, 1890–1903	
Coal and Earnings	
Coal and the Ton-mile Unit	
Coffee, Prices, 1899, 1903.	
Colorado Fuel and Iron Case	
Commerce, Development of, Experimental Rates and	
Commerce Should be Left Free from Fettering Laws	
Commercial Forces and Rates	
Commercial Law and Politics	
3	
Commercial Law and Sumptuary Legislation	
Commission Defeated Repeatedly in the Courts Commission Derelict says the Court	
Commission Wrong on the Facts	
Commission's Misfit Reply	
Commodities and their Equivalent in Railway Service	
Commodities, Increased Purchasing Power of64,	
Commodities will Buy More Railway Service than in 1899	
Commodity Rates	
Commodity Rates, Southern	
Company Freight	
Competition and Rate-fixing	
Competition and Rates	
Competition, Commercial.	
Competition Controls	
Competition of Markets	
Complaints are Inevitable.	
Complaints, Number of	
Compositors' Wages, 1899, 1903.	
Concentration of Rate-making Power, Effects of 20, 21	
Conductors Number and Wages 1002	

PAGE
Congress and the Rate-making Power
Constitution and Rate-making Power130, 131
Control and Ownership79, 83
Cooley, Judge, on Official Rate-making131, 132
Corn and Equivalent in Railway Service64
Corn Meal, Prices, 1899, 1903
Corn Production, 1880, 1890, 1900, 1905
Corn, Rates and Prices, 1897, 19059
Cost of Operation, 1899, 190354
Cost of Operation and Earnings70
Cost of Operation and Wages, 1895-190369
Cost of Railway Service and Cost of Commodities 62, 63
Cost of Railway Service, Decrease
Cost of Transportation
Cost of Transportation and Rates
Cotton Crop Report and Government Control149, 150
Cotton Goods, Rates and Prices, 1897, 19059
Cotton Production, 1880, 1890, 1900, 1905
Courts and the Commission107, 108, 109, 110, 112-114
Cowan, S. H., on Competition
Cowan, S. H., on Esch-Townsend Bill
Cows and Equivalent in Railway Service
Coxe Case113
Dairy Products, Cost of, 1899–1903
Day's Labor, A, Will Buy More Railway Service 67-68
Decline in Rates
Declining Railway Freight Rates
Depositors in Banks, Number of
Depositors in Savings Banks as Railway Owners81-83
Depression, Railway, Effect of
Deprivation of Property, without Due Process of Law146
Development and Complaints
Development of the United States and the Railways10, 12, 15
Differentials
Differentials and Interstate Commerce Commission148, 149
Differentials and Politics31
Discriminations
Discriminations and the Elkins Law
Discriminations in Government Rate-fixing
Discrimination in Localities and Government Regulation27
Dissimilarity of Circumstances and Long and Short Haul
Clause
Distance Tariffs Would Result 142 149

PAG	E
Dividends, 1888–1903	
Dividends, 19036	
Dividends and Earnings	
Dividends and Interest Do Not Increase Railway Charges7	3
Dividends and Rates7	3
Document No. 25736-38, 95-7, 98, 100, 101, 10	13
Document No. 257 Unfair	7
Drugs, Prices, 1890-190358, 6	0
Dun's Index Numbers show Decreased Cost of Railway	
Service	3
Earnings and Betterment	0
Earnings and Bonds7	0
Earnings and Cost of Operation	0
Earnings and Dividends	
Earnings and Interest	
Earnings and Stock	
Earnings and Surplus	
Earnings and Taxes	
Earnings, Distribution of	
Earnings, Gross, 1903.	
Economic Friction in Railway Business	
Economic Law and Remedial Legislation	
Educational Institutions as Railway Owners	
Effect of the Decreased Purchasing Power of Money51-5	
Eggs, Prices, 1899, 1903	
Eggs, Rates and Prices, 1897, 1905.	
Elasticity in Rate-making, Necessity of	
"Elements of Railway Economics," by W. M. Acworth.17,18,23,2	
Elkins, Stephen B., on Excessive Rates	
Elkins Law, 1903	
Emergency Rates	
Eminent Domain and Rate-fixing	
Employees, Railway, 1893-1903	
Employees, Railway, 1893, 1894, 1903	
Employees, Railway, and Proposed Legislation134, 135, 13	
Employees, Railway, and Railway Depression	
Employees, Railway, Number of	
Employees, Railway, Number of, 1893-1903	
Employees, Railway, Number and Wages, 1903	
Engineers, Number and Wages, 1903	
England, Government Regulation in	
Environment's Subtle Influence94, 9	
Esch-Townsend Bill	27

Esch-Townsend Bill, Locomotive Engineers, on	PAGI
Esch-Townsend Bill and Rebates	
"États Unis au XXe Siècle"	
Europe, Railways in	
Europe's Lesson	
European Railways, Private Ownership	
Evading Its Duty	
Experimental Rates	
Expert Knowledge Necessary in Rate-making	
Exports, 1880, 1890, 1900, 1903	38
Facts, Interstate Commerce Commission and the10	
Farm Products, Prices, 1890–1903	112, 114
Farm Products, Prices, 1890-1903	58, 60
Farm Products will Buy More Railway Service	64
Farmers' Savings from Reduced Rates	
Fire Insurance Companies as Railway Owners	85, 86
Firemen, Number and Wages, 1903	66
Fish, Prices, 1899, 1903	61
Flexibility of Rates	37, 140, 167
Flood of Litigation Would Follow	146
Flour, Prices, 1899, 1903	61
Flour, Rates	49
Flour, Rates, 1800-1903	45
Flour, Rates and Prices, 1897, 1905	
Food Prices, 1890-1903	
Food Products, Cost of, 1899-1903	
Foreign View, A	
"Forty-year Review of Changes in Freight Tariffs"	
France, Railways in	
France, Ton-mile Rates, 1870-1902	
Freedom of American Railroads, Leroy-Beaulieu on	
Freight Bureau Cases	
Fuel, Cost of, 1899, 1903	
Fuel Prices, 1890–1903	
Fuel, Proportion to Revenue	
Funded Debt, Interest on.	
Funded Debt, Interest on, 1892–1903	
Garden Products, Cost of, 1899-1903	62
Genesis of the Interstate Commerce Law	
Geographical Classification	
Georgia Commission Cases	
Georgia Reilroad Jim Crow Case	

	PAGE
Georgia State Regulation of Rates	21-22
Germany, Government Regulation in	.166-168
Germany, Railroads in	
Germany, Ton-mile Rates, 1870-1902	169
Glassware Rates	
Glucose Rates	47, 49
Government Control, Austria-Hungary	.162, 163
Government Control, France	, 162, 168
Government Control, Germany	166-168
Government Control, Italy	.164, 165
Government Control, United Kingdom	153-157
Government Control and Experimental Rates	15
Government Ownership	, 149-153
Government Ownership, Canada	
Government Rate-making and Flexibility of Rates	12
Government Rate-making Inelastic	.140, 141
Government Receipts and Expenditures, 1880, 1890,	1900,
1903	35, 36
Government Regulation, Australia	
Government Regulation and Discrimination Between L	
ities	27
Government Regulation and Private Enterprise	139
Grain Rates	
Grain Rates, German	
Great Reductions to the South	
Griffin Case	117
Hadley, A. T., on Effect of Dividends on Rates	
Hadley, A. T., on Government Control in Italy	
Hadley, A. T., on Increase of Rates	
Hadley, A. T., on Massachussetts Railroad Commission	
Hadley, A. T., on Purchasing Power of Money	
Hadley, A. T., on Watered Stock	73
Hadley, A. T., on "What the Traffic Will Bear"	
Hats, Rates and Prices, 1897, 1905	
Hay	
Hay and its Equivalent in Railway Service	
Hay, Prices, 1899, 1901	
Hay, Rates and Prices, 1897, 1905	
Hay, Tonnage, 1902 High-grade Freight, Increase in	
High-grade Freight, Increase in	
Hogs and the Equivalent in the Railway Service	
Horses and the Equivalent in the Kallway Service	

House Furnishings, Prices, 1890–190358, 6	1
Hudson River Ice Crop	
Hungary, Railroads in	
rungary, 10n-mile Rates, 1870-1902	15
Ice, Rates, 1889–1890	
Illinois Central R. R. Co. Stock.	2
Import Rates Case	
Importance of the Question	
Imports, 1890, 1900, 1905	
Income, Railway, Distribution of	
Increase in Rates	
Increase of High-grade Traffic	
Increased Use of Railway Transportation34, 35, 3	
Increases in Rates would Result	
Increasing Cost of Railway Operation	
Industrial Commission Report, 1900	
Industrial Insurance, Railway Securities	
Industrial Revolution	
Industries, Building Up of	
Inequalities Pending Fixing of All Rates	
Informal Complaints	
Injunctions and Rebates	
Intercolonial Railway	
Interest and Earnings	
Interest and Rates	
Interest and Nates Interest on Funded Debt, 1892–1903	
Interest on Funded Debt, 1993	
International Railway Congress	
Interstate Commerce Act, Adequate Judicial Interpretation of .146	
Interstate Commerce Commission and Complaint120-12	
Interstate Commerce Commission and Concentration of Rate-	•
making Power	1
Interstate Commerce Commission and Differentials148, 149	
Interstate Commerce Commission and Enforcement of Present	
Law91	1
Interstate Commerce Commission and Rate-making	
Power	1
Interstate Commerce Commission and the Courts107, 108	
109, 110, 112-114	į
Interstate Commerce Commission and the Distance Tariff143	3
Interstate Commerce Commission, Changing Personnel of 31	ı
Interstate Commerce Commission, Duties of109, 167, 16	
Interstate Commerce Commission on Elkins Law 9	

PAGE	
Interstate Commerce Commission on the Ton-mile Unit36	
Interstate Commerce Commission, Powers of 119, 120	
Interstate Commerce Commission, Propaganda for Increased	
Power93, 94	
Interstate Commerce Commission Report, 190097, 98	
Interstate Commerce Commission, Statistics of95-97	
Interstate Commerce, Development of	
Interstate Commerce Law	
Interstate Commerce Law and Natural Decline in Rates25	
Intricacy of Rate-making	
Iron Molders' Wages, 1899, 1903	
Iron Rates47, 50	
It is General Rate-making	
Italy, Railroads in	
Italy, Ton-mile Rates, 1870-1902	
,	
Joint Rates, Wheat, 1800–190345	
Joint Rates, Wheat, 1000 1000	
Kansas Corn	
Kearney Case	
Kerosene Oil, Rates and Prices, 1897, 19059 Kirkman, Marshall M., on Remedial Legislation125, 126	
Knapp, Martin A., on Excessive Rates	
Knapp, Martin A., on Interstate Commerce Act124, 125	
Knoxville Rates	
Knoxville Rates	
Labor, Increased Purchasing Power of	
Laborers' Wages, 1899, 1903	
Lamb, Prices, 1899, 190361	
Land Frauds and Government Enterprise	
Lard, Prices, 1899, 1903	
Law Against Rebates117, 118	
Law of Rates	
Law of the Land	
Laws of Trade	
Ledyard, H. B., on Rebates	
Legislation, Adequacy of Existing83	
Legislation and Rebates128, 129	
Legislation and the Laws of Commerce	
Legislation as a Panacea	
Legislation, Enforcement of	
Legislation, New, Necessity for Judicial Interpretation of146	
Lagislation not Necessary	

	PAGE
Leroy-Beaulieu, Pierre	
Lesson from Experience	
Let there be no False Pretences	
Life Insurance Companies as Railway Owners	
Liquor Rates	
Litigation and Rate-fixing	
Location, Natural Advantages of	116, 117
Locomotive Engineers on Esch-Townsend Bill	136
Lodge, H. C., on Port Differentials	132
Long and Short Haul Cases	114-117
Louisville, Ky., Rates	48
Low-grade Freight	17-18
Low-grade Freight and the Ton-mile Unit	36-38
Lumber, Prices, 1890-1903	58, 60
Lumber Rates	53
Lust of Power	93, 94
Machinists, Number and Wages, 1903	66
Machinists' Wages, 1899, 1903	67
Machinery, Improved	
Maintenance, Expenditure for, 1893-1903	.77, 78, 79
Malt Liquor Rates	
Manufacturers' Protest Against Rate-fixing	
Markets, Competition of	12, 17
Marietta Rates	
Massachusetts Railroad Commission	
Maximum Rate Case	
Maximum Rates, France	
Maximum Rates, United Kingdom	
Meats, Cost of, 1899-1903	
Meats, Rates	
Memphis Rates	
Metals, Cost of, 1899-1903	
Metals, Prices, 1890-1903	
Meyer, Hugo R., on Effects of Government Regulation	
Meyer, Hugo R., on Government Regulation in Australi	
Meyer, Hugo R., on Regulation in Europe	
Mileage and Capitalization	
Mileage Basis for Rates	
Mileage, European	
Mileage, Increase in	
Mileage Rates Condemned	
Milk, Prices 1899, 1903	
Minimum Rates	

	PAGE
Mischief Will Follow	147
Mischievous Meddling, but with Good Intentions	31
Misleading Statistics	
Missouri Pacific Railway Case	
Molasses, Prices, 1899, 1903	
Molasses Rates	
Money, Amount in Circulation, 1880, 1890, 1903	
Money Purchasing Power, Decrease in	.51-52
"Monthly Summary of Commerce and Finance of the U.S.	
Moseley, Edward A., Circular to Trade Organizations	
Mules and the Equivalent in Railway Service	
Mutton, Prices 1899, 1903	61
Nashville Coal Case	109
National Banks, Capital of, 1880, 1890, 1903	
Natural Decline in Rates Stopped in England by Legisla	
tion	
Necessity for the Investment of More Capital	
New Haven Journal on Canadian Rate Regulation	
Newcomb, H. T., Railways in Foreign Countries1	
Newspapers, 1880, 1890, 1900, 1903	
Nominal Advance in Rates was Unavoidable	55, 56
Oatmeal Rates	47, 49
Oats, Rates and Prices, 1897, 1905	
Official Rate-making in Georgia	
One Effect of Railway Depression14	
Operation, Cost of	
Orange Routing Case	
Order of Railway Conductors on Proposed Railway Legisla	
tion	
Orders of the Commission and Enforcement	
Orders of the Commission, Contested	
Orders of the Commission, Contested	
Orders of Commission Not Sustained by the Courts10	
Ore Rates	
Over-Capitalization	
Ownership and Control	79, 83
Pains of Industry12	6. 127
Painters' Wages, 1899, 1903	
Party Rate Case	
Passenger Mileage 1880-1003	

	DACE
Passenger Mileage, 1899, 1903	54, 55
Passenger Rate Cases	
Patents, Number Issued, 1880, 1890, 1900, 1903	35
Personal Equation and Rate-making	
Philadelphia Board of Trade	
Pickles, Rates	
Plumbers' Wages, 1899, 1903	
Policies, Fire, Railway Securities	
Politics and Rate-making	
Policy Holders, Life, Railway Securities	
Political Demoralization	
Political Rate-making in Germany	
Politics and Government Ownership	
Politics and Rate-making	
Politics Would Supplant Economics	
Pooling	
Population and Transportation per capita, 1880-1903.	
Pork, Prices, 1899, 1903	
Pork, Rates, and Prices, 1897, 1905	
Port Differentials	
Port Differentials Would be Illegal	
Post Office Scandal and Government Management	
Post Offices, Number of, 1880, 1890, 1900, 1903	
Potatoes and the Equivalent in Railway Service	
Potatoes, Prices 1899, 1903	
Potatoes, Rates and Prices, 1897, 1905	
Preference Clause and Differentials	
Preferential Rates	
Present Effectiveness of the Commission	
Present Law has Hindered Reductions	
Present Law is Adequate	83
Prices and Rates	61, 65, 135
Prices and Rates, 1899-1903	. 62, 63, 64
Prices and Rates, Hay10	04, 105, 106
Prices not Affected by Rates	
Prices, Wholesale, 1897, 1905	
Private Enterprise and Government Regulation	139
Private Ownership, European Railways	170
Propaganda of Commission for Increased Power	
Prosperity, Railway	
Prouty, C. A., on Rigidity of Rates	
Prouty, C. A., on Unsustained Cases	
Prunes, Prices, 1899, 1903	
Public The Gets the Benefit of Improved Methods	

	PAGE
Radial System, Austria	162
Radial System, France	162
'Railroad Transportation," by A. T. Hadley	15, 16
Railway and Canal Traffic Act, 1894	155
Railway Bonds Which Earn Nothing	
Railway Capitalization	
Railway Charges not Taxes	
Railway Conductors in Opposition13	
Railway Employees and Railway Prosperity	70, 71
Railway Income and What Becomes of it	69, 70
Railway Officers Work for Shippers	
Railway Ownership Diffused	79, 80
Railway Prosperity and Quality of Service	77, 79
Railway Rates and Wages	66
Railway Rates Have Not Advanced	
Railway Securities and Fire Insurance	85-86
Railway Securities and Accident Companies	87
Railway Securities and Educational Institutions	87
Railway Service and Cost of Breadstuffs, 1899-1903	63
Railway Service and Cost of Dairy Products, 1899-1903	63
Railway Service and Cost of Clothing, 1899-1903	63
Railway Service and Cost of Commodities62,	63, 64
Railway Service and Cost of Food Products, 1899-1903	63
Railway Service and Cost of Garden Products, 1899-1903	63
Railway Service and Cost of Meats, 1899-1903	63
Railway Service and Cost of Metals, 1899-1903	
Railway Service and Other Industries, 1880, 1890, 1900, 1903.	
Railway Service, Barley and Equivalent in	
Railway Service, Buckwheat and Equivalent in	
Railway Service, Cattle and Equivalent in	64
Railway Service, Corn and Equivalent in	64
Railway Service, Cows and Equivalent in	
Railway Service, Hay and Equivalent in	
Railway Service, Hogs and Equivalent in	
Railway Service, Horses and Equivalent in	
Railway Service, Mules and Equivalent in	
Railway Service, Oats and Equivalent in	
Railway Service, Potatoes and Equivalent in	
Railway Service, Rye and Equivalent in	
Railway Service, Sheep and Equivalent in	
Railway Service, Wheat and Equivalent in	64, 65
Railway Service Purchasable by a Day's Labor—	
Blacksmiths' Wages, 1899, 1903	
Poilarmalrard Wages 1900 1002	67

Railway Service Purchasable, etc.—Continued.	PAGI
Bricklayers' Wages, 1899, 1903	67
Carpenters' Wages, 1899, 1903	
Compositors' Wages, 1899, 1903	
Hod Carriers' Wages, 1899, 1903	
Iron Molders' Wages, 1899, 1903	67
Laborers' Wages, 1899, 1903	6
Machinists' Wages, 1899, 1903	67
Painters' Wages, 1899, 1903	67
Plumbers' Wages, 1899, 1903	67
Stonecutters' Wages, 1899, 1903	67
Stonemasons' Wages, 1899, 1903	67
Railway Stock Which Earns Nothing	74
Railways, American, Value of	.71, 72
Railways and Development of the United States	
Railways do not Control Rates	.20, 21
Railways in Foreign Countries	
Railways Opposed to Rebates	
Rate and Rates	
Rate-fixing and Competition	
Rate-fixing and Increase in Rates	
Rate-fixing and Politics	
Rate-making and the Constitution1	
Rate-making and Timidity of Capital	
Rate-making, Cooley, T. M., on	
Rate-making, Difficulties of	32, 149
Rate-making, Expert Knowledge Necessary	
Rate-making Power1	
Rate-making Power and Rebates	
Rate-making Power and Rigidity of Rates	
Rate-making Power and the Commission	
Rate-making Power and Voluntary Reductions1	
Rate-making Power, Importance of	
Rate-making Power, Philadelphia Board of Trade on	
Rate-making Power, Taylor, W. D., on	
Rate Reductions and Traffic Men	
Rate Regulation and Limitation of Market	
Rate Regulation and Politics	
Rate-revising and Rate-making	
Rates, 1897, 1905	
Rates, 1890–1903	
Rates, American and European	
Rates American and Foreign	

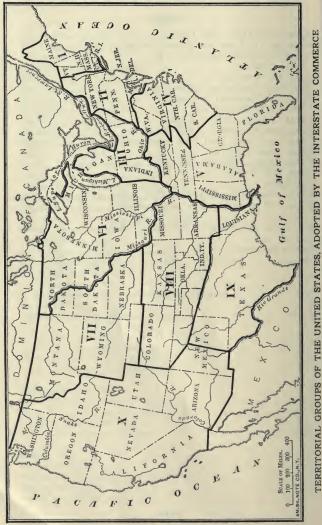
PAGE	
Rates and Commercial Forces	
Rates and Competition	
Rates and Dividends73	
Rates and Interest73	
Rates and Money Value52	
Rates and Prices	
Rates and Prices, 1890-190357, 59, 60, 61	
Rates and Prices, 1899-190362, 63, 64	
Rates and Volume of Traffic	
Rates and Wages	
Rates, Basis of	
Rates, Experimental147	
Rates, Flexibility of	
Rates, Increase in, 1899, 1903	
Rates, Increase of, and Rate-fixing145	
Rates, International Railway Congress on	
Rates, Law of	
Rates, Natural Decline in, and Government Regulation,	
United Kingdom	
Rates, Nominal Advance in	
Rates, not Excessive	
Rates, Passenger, American and Foreign	
Rates per Ton-mile	
Rates Prior to 1887	
Rates, Reductions, 1890, 1895, 1899	
Rates, Relation Between	
Rates, Since 1887	
Rates the Traffic will Bear	
Rates, Voluntary Reduction of	
Rates which do Not Affect Retail Prices	
Real Power in Inverse Ratio to Statutory Power140	
Rebates	
Rebates and Legislation	
Rebates no Longer General	
Rebates, Railways Opposed to	
Recapitulation of Railway Ownership Data88, 89	
Receipts, Passenger-mile, 1899, 1903	
Receipts per Ton-mile, 1899	
Receipts per Unit of Service	
Receipts per Unit of Service	
Reductions in Rates	
Reductions in the Classification of Freight	
Regulation of Wages by Parliament30	
Relation of Capitalization to Mileage	

PAGI
Remedial Legislation125, 120
Return on Railway Investments
Revenue, Freight, 1899-190397-103
Revenue, Increase in, 1899, 190395-97, 106, 103
Revenue, Increase in, from Hay
Rice, Prices, 1899, 1903
Rome and Atlanta Rates9
Rome Rates.
Roosevelt, President, on Elkins Law
Roosevelt, President, Railway Conductors, on Message of 138
Routing
Russia (European), Ton-mile Rates, 1870–1902
Rye and Equivalent in Railway Service
The and Equivalent in Ranway Service
St. Louis Rates
Salaries and Wages, 1895, 1903
San Bernardino Case
Savings Banks and Railway Securities
Securities, Railway and Accident and Guaranty Companies86-87
Securities, Railway, and Educational Institutions88
Securities, Railway, and Life Insurance Companies84, 88
Securities, Railway, and Savings Banks81-82
Securities, Railway, Distribution of88
Selma Rates31
Service, Quality of77-79
Shareholders, Number of
Shares, Railroad, Owned by Banks82
Sheep and Equivalent in Railway Service64
Shippers and Rate-making
Shippers and Traffic Men
Shipping, American, 1880, 1890, 1900, 190335, 36
Shoes, Rates and Prices, 1897, 1905
Soap Manufacturers and Rate-making
Soap Rates47, 50
Social Circle Case
Some Contested Decisions of the Commission
Standard for Measuring the Trend of Rates
State Operation, Leroy-Beaulieu on
State Railroad Commissions
Station Agents, Number and Wages, 1903
Statistics, Misleading
Stevens, F. C., on Esch-Townsend Bill140, 141
Stock

	PAGE
Stock held by Accident and Guaranty Companies	87
Stock held by Educational Institutions	88
Stock held by Fire Insurance Companies	86
Stock held by Life Insurance Companies	85
Stock, Small Holders of	
Stock, Unremunerative, 1888-1903	
Stonecutters' Wages, 1899, 1903	
Stone Masons' Wages, 1899, 1903	
Sufficiency of the Elkins Law	
Sugar, Prices, 1899, 1903	
Sugar Rates.	
Sugar, Rates and Prices, 1897, 1905	
Sumptuary Legislation is not New	
Supreme Court and the Commission	
Supreme Court on Rate-making Power	
Surplus and Earnings	
Sweet Gum-wood Articles	
Syrup Rates	50
Taft, W. F., Address at International Railway Congress.	137
Tariffs, Filed, Number of	19, 20
Taxation, Nature of	32-33
Taxes and Earnings	70
Taylor, W. D., on Law of Rates	16
Taylor, W. D., on Natural Adjustment of Rates	
Taylor, W. D., on Rate-making Power	
Tea. Prices 1899, 1903	
Tea, Rates and Prices, 1897, 1905	
Telegraph, Operators, Number and Wages, 1903	
Telegrams, Number sent, 1880, 1890, 1900, 1903	
"Tempering the Wind to the Shorn Lamb" Terminal Charges, United Kingdom	717, 18
There would be Few Voluntary Reductions in Rates	
Through Rates	
To Abolish Port Differentials	
Ton-mile, 1860, 1870, 1905	
Ton-mile Basis	
Top-mile Rates, 1870–1885	
Fon-mile Rates, 1870–1902	
Austria	169
France	169
Germany	169
Hungary	169
Y4 - 1	1.00

Ton-Mile Rates 1870–1902—Continued.	AGI
Ton-Mile Rates 1870–1902—Continued. Russia (European) United States	.169
United States	.169
Ton-mile Rates, 1890–1905	33
Ton-mile Rates, 1899-1903	91
Ton-mile Rates, 1899, 1903	96
Ton-mile Unit, Stability of	36
Ton-mileage, 1880-1903	
Ton-mileage, 1899, 1903	
Ton-mileage, 190351,	
Ton-mileage, 1899–1903	
Ton Unit of Service	
Traffic Increases Greatest where Ton-mile Receipts are	
Highest4	
Traffic Men and Rate Reductions	
Traffic Men and the Shippers	
Trainmen, Number and Wages, 1903	
Transportation a Commodity to be sold	
Transportation by Water	
Transportation, Cost of	
Transportation, Increased Use of	
Transportation per Capita Population, 1880–190334	, 36
Transportation Practices	
"Transportation Tax"	
Treasury Deficit and Government Management	151
Tuttle, Lucius	17
Typical Recent Reductions in Rates	
Typical Recent Reductions in Rates	2-00
"United States in the Twentieth Century"	1.0
United Kingdom, Railways in	157
United States, Ton-mile Rates, 1870–1902	160
Usury and Sumptuary Legislation	
's the sumption of the state of	.30
Value of Freight, 1903	49
Veal, Prices 1899, 1903	
Veasey, Wheelock G., on Fettering Laws.	
Vinegar, Prices 1899, 1903	
Volume of Traffic and Rates	
volume of frame and mates	, 42
Wages	60
Wages, 1899, 1903	
Wages and Equivalent, Railway Service	
Wages and Income	
Wages and Rates	01

	PAGE
Wages and Salaries, 1895-1903	71
Wages and the Purchasing Power of Money	52
Wages, Sumptuary Legislation and	30
"Water" Stock	72, 73
Water Transportation	25
West-bound Traffic and the Ton-mile Unit	38
What Has Happened in Canada	22-23
"What the Traffic Will Bear"	16, 17, 18
Wheat and Flour Rates Decline	$\dots .44 45$
Wheat and Equivalent in Railway Service	64, 65
Wheat Production, 1880, 1890, 1900, 1905	35, 36
Wheat Rates, 1880–1903	45
Wheat, Rates and Prices, 1897, 1905	9
Wheat Will Buy More Railway Service	65
Wire Rates	53
Woolen Goods, Rates and Prices, 1897, 1905	9
Would Add to the Incentive for Rebating	128-129
Year Book, Department of Agriculture, 1903	64, 65
Zone-tariff, Hungary	163



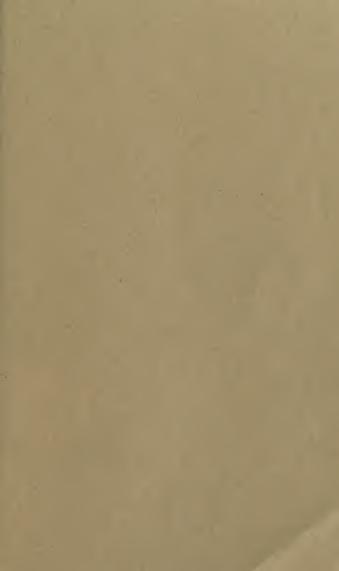
STATISTICS

OF

FOR THE COMPILATION

NOISSIMMOO

AMERICAN BANK NOTE CO. NEW YORK



INCOME RAILWAY

THERE IT GOES AND /HO GETS IT

OFFICIAL STATISTICS BASED ON FOR 1903

> 602'168'142\$ ON DEBT INTEREST

90+'804'988\$ отнев оревьтіис ехреиѕеѕ

> \$17,15,321,415 SALARIES MAGES AND

\$146,509,031 \$146,509,031

FUEL

GOVERNMENTS OF PUBLIC PURPOSES PERMANENT \$41,948,183 NISCELLANEOU \$44,681,183 7.41 PER CENT. PAID TO \$57,849,569

939'941'991\$ DIAIDENDS

SURPLUS AND MISCELL-ANEOUS 104,657,896

PROPERTIES AND N8URANCE FUND TO PRESERVE 5.88 PER CENT

8.52 PER CENT. THE OWNERS PAID TO

PAID TO EMPLOYEES AND DEALERS 84.48 PER CENT.





